To: The Joint Legislative Corrections Oversight Committee

From: Commissioner Andrew Pallito

Reviewed by CHSVT Advisory Board on June 10, 2014
Input from Board: June 19 – 22, 2014

Date: July 15, 2014

Community High School of Vermont Legislative Report:

H.885"… the Commissioner of Corrections, in consultation with the Community High School of Vermont Board, shall prepare and submit a report to the Joint Legislative Corrections Oversight Committee on the current trends relating to the student population at the Community High School of Vermont."

What follows is the report for the Joint Legislative Corrections Oversight Committee's consideration:

This report is designed with the following principles in the forefront:

- The reduction of recidivism is an intentional outcome of the Corrections Education Program of which CHSVT is a component (CHSVT, Vermont Correctional Industries and Workforce Development).
- The work of Corrections Education is intentional, mission and vision driven and provides rigorous and relevant academic, career/technical, social experiences that support the Living, Learning and Working of offenders as laid out by the VT Agency of Education's Educational Quality Standards.
- The programs and courses offered through CHSVT, have been and will continue to be implemented and reviewed through evidenced based correctional, educational and industry practices.
- All programs and course offerings will be designed to meet the educational needs of the individuals who participate in them, and they will be in line with adult learning theory.
- Ensure educational opportunities are of high quality, structured and available to all students involved with the Department of Corrections and not duplicated in the community.

Corrections Education:

The Community High School of Vermont

Vermont Correctional Industries

Workforce Development

Part of the Department of Corrections' mission is to repair the harm done, address the needs of crime victims and manage the risk posed by offenders. This is where Corrections Education – comprised of The Community High School of Vermont, Vermont Correctional Industries and Workforce Development integrate into the Department's overall mission.

The Community High School of Vermont is an academic and technical high school fully accredited through the New England Association of Schools and Colleges (NEAS&C) and approved as an independent school by the Vermont State Board of Education. The school's mission is to provide an accredited, coordinated, and personalized education that assists students in their academic, social and vocational successes. Students are expected to meet rigorous common core state standards in academics and demonstrate proficiency in reading, writing, and numeracy. They must also meet industry and/or common career technical core standards in vocational/trades/technical education and social benchmarks via the standards presented in the "16 Habits of Mind" (Costa & Kallick, 2000). Upon completion of all requirements, students earn a high school diploma and, in many cases, industry certifications.

CHSVT operates within the functions of the Vermont Department of Corrections and within the regulatory responsibilities of the Vermont Agency of Education. Students are under the custody of the Commissioner of the VTDOC; therefore, the design, operation, and continuous improvement of this school is tailored to the context of corrections and provides programs that balance public safety and security with the educational needs of its students.

The Community High School of Vermont, as a vital component of Corrections Education, operates within the following overarching Vision and Mission:

Vision: **Offenders will live, learn and work in their communities as self-supporting and productive members.**

Mission: Corrections Education will provide learning environments for offenders based upon individual need to increase their skills in living, learning and working in order to reduce recidivism. The learning environment will utilize industry, education and corrections best practices to support offenders as students in educational and work settings through CHSVT, VCI and offender work programs.

The guiding belief of Corrections Education and CHSVT is that all academic and vocational educational services shall adhere to high standards of purpose, empowerment, self-directed decision-making,

excellence, recognition, integrity and diversity. Our educational programs and services offer a choice of learning activities and opportunities to a widely diverse adult student population. Students are offered a myriad of opportunities to expand their learning knowledge and application of skills in traditional academic classes, non-traditional activities and applied learning settings. All classes and programs are available to students earning a high school diploma and to those with a diploma seeking to improve their academic and/or vocational skills, earn an industry certification, and seeking employment opportunities.

For individuals returning to the community from correctional facilities, and for other community-supervised individuals, educational services are supported and provided within the Vermont Probation and Parole Offices (P&P). To the greatest extent possible, community-supervised individuals are encouraged to participate in meaningful educational opportunities that are anchored in their communities.

Through an integrated and coordinated approach, students are offered training, skill development, mentoring, internships and work experiences. Students learn to examine how they react and interact with the environment around them through direct instruction, role playing, reflections and project activities. *The Habits of Mind* (Costa and Kallick 2000) provides a foundation for the language of social awareness and positive change.

Detailed description of the School's Programs, Curriculum, and Outcomes:
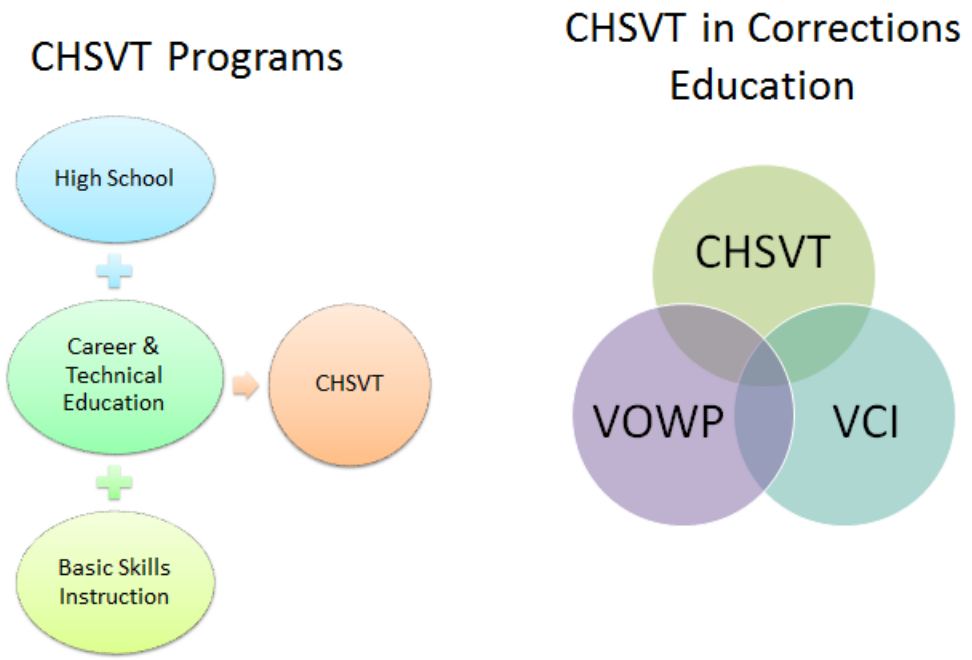
Programs:

Traditionally, the Community High School of Vermont has been the education stream that has served individuals associated with The Department of Correction; for both those offenders in the community and those who are incarcerated. In the last three years, there have been indicators that make it clear the definition of Corrections Education must be reviewed and incorporated into the overall Corrections system in a seamless manner.

One of the strongest indicators is the research, which indicates that addressing criminogenic needs or dynamic risk factors reduces criminal thinking, builds skills, and reduces recidivism. These criminogenic targets are:

1) Criminal Attitude & Beliefs
2) Peer Associations
3) Self-Regulation and Self-management skills
4) Aggression
5) Impulsivity
6) Family
7) Vocational Skills & Employment
8) Education
9) Substance Abuse
10) Constructive Leisure Time
11) Relapse Prevention

These dynamic risk factors can be assessed, addressed, and changed with the people DOC works with, once they are specifically identified and targeted for instruction and remediation. (See Appendix: Reducing Recidivism through Education and Employment)

"There are workforce program components that can be used for individuals with criminal histories to improve their employment outcomes, including education and training, soft/cognitive-skill development transitional job placements, non-skill-related interventions, subsidized employment, job development and coaching, retention and advancement services, and financial work incentives. In most circumstances, program components need to be used in combination to meet individual's complex needs as they change over time. Research has shown that simply helping a high-risk/high-need individual with a criminal history who is not job ready to write a resume and apply for jobs is not enough." (The Council of State Governments Justice Center: Integrated Reentry and Employment Strategies, September 2013)

A 2009 study in Washington State found a reduction in recidivism of 8.3% for education programs in corrections that offer education or postsecondary education. (Aos, S., Drake, E., & Miller, M. 2009).

"Education and training are key components of job-readiness preparation and are critically important for increasing access to higher-quality employment opportunities. (Pheihl, "Crime, Work and Reentry", 2008)

With the economic challenges and changes, it is necessary for all programs associated with Corrections Education to provide a model of education that will work in cooperation and coordination with the Department and other agencies. It is equally important that the programs attend to the development of the fundamental 21st Century Skills. By identifying, organizing and streamlining the services that are provided, teachers and staff are able to assist students in obtaining the education and work skills they need to become productive citizens.

Population served: All persons under the custody of the Commissioner of Corrections, to include those incarcerated and those being supervised in a community setting. There are three distinct populations within the DOC who receive Corrections Education services:

1. Title 28 VSA§ 120 (a) – persons who have not completed secondary education which is supported by every Vermonter's right to an education regardless of their age;

2. Title 28 VSA§ 120 (f) All persons…who are under the age of 23 and have not received their diploma;

3. Those individuals regardless of educational level, who do not have the academic, social or technical skills that will allow them to successfully participate in the community upon release, supported by the VTDOC's Risk Assessment and Case Planning process.

It is the members of this latter group who Corrections is focusing on in terms of reducing the recidivism rate. It is important to note, that this last group may already account for individuals in #1 and #2.

CHSVT Campuses: Corrections Education provides a full range of corrections educational services, including special education, 504 and accommodations under the Americas with Disabilities Act (ADA), providing seamless educational transition services from incarceration to community, increasing enrollment in skill development courses, and placing a greater emphasis on workforce readiness.

The integration of CHSVT, VCI and Workforce Development as Corrections Education support the findings of studies conducted on a national level that demonstrate inmates who are educated, employed and trained during incarceration achieve a higher rate of employment upon release, and that employment is at higher rates of pay. (The Council of State Governments Justice Center: Integrated Reentry and Employment Strategies Reducing Recidivism and Promoting Job Readiness, 2013)

CHSVT Campuses are traditional and at the same time non-traditional. Traditional academic courses are taught on a regular basis, and integrated learning environments are throughout the facilities. All campuses offer a wide variety of educational learning opportunities that culminate in a high school diploma or industry based credential. Educational programming tends to have the greatest impact on employment outcomes if it results in credentialing or a trade license. (Julie Strawn, *Beyond Job Search or*

Basic Education: Rethinking the Role of Skills in Welfare Reform – Washington: Center for Law and Social Policy, 1998).

CHSVT brings accredited certified teaching into the VCI shops allowing the offenders to stay on the job and develop skills needed to succeed in the work place. In a very competitive job market where offenders are already competing at a real disadvantage, it is important that valid and foundational skill training be available and supported by correctional staff. "Offenders that have the lower levels of educational skills, and are therefore less employable, are also the most likely to return to prison time and time again" (Przybylski, 208, p. 38).

It is important that vocational training be recognized as an investment. Studies have demonstrated that this vocational training can provide $5.67 in taxpayer benefit for every $1 of cost (Przybylski, 2008). The 2009 study in Washington State found a reduction in recidivism of 9.8% for facility-based vocational programs and a 4.6% reduction for community-based employment programs.

Curriculum:

The Curriculum of the Community High School of Vermont is integrated and specialized to the specific learning needs of each individual. Programs are tailored to address criminogenic risk and learning beginning with an assessment of criminogenic needs with the Ohio Risk Assessment System (ORAS) and an educational assessment with the Comprehensive Adult Student Assessment System (CASAS). The data and information from these assessments is then used to develop a Living, Learning and Work Plan (Personal Learning Plan).

The existence and development of flexible pathways of learning recognize that traditional schooling does not fit everyone's needs or abilities. CHSVT is another flexible pathway for students who, for whatever reason, have not been successful in the traditional school setting, and have not attained the needed skills to be able to obtain or maintain a job. Students demonstrate their learning through flexible and multiple pathways outlined in the Living, Learning and Working Plans (Personal Learning Plans). CHSVT's Living, Learning, and Working Plan (LLW) mirrors the Personal Learning Plans outlined in the Education Quality Standards. The plan is developed by the student and a representative of the school and updated annually. The LLW plan reflects the student's emerging abilities, aspirations, interests and dispositions. The plan defines the scope and rigor of academic and experiential opportunities necessary for the student to successfully complete secondary school and attain college and career readiness (Educational Quality Standards – Vermont State Board of Education).

CHSVT Academic: Students are expected to meet rigorous common core state standards in academics and demonstrate proficiency in reading, writing, and numeracy. CHSVT offers a full complement of academic courses. The courses are determined by the student's individual Living, Learning and Working Plan, developed when the student enrolls in CHSVT. Each individual's Living, Learning, and Working Plan

addresses the courses necessary to complete the graduation requirements and outline possible career paths for further exploration, along with the courses that complement those pursuits. (For a list of specific courses refer to Appendix.)

CHSVT Career and Technical Education: Students must also meet industry and/or common career technical core standards in vocational/trades/technical education. Workforce readiness skills are taught that apply across a variety of jobs and life contexts. Workforce readiness skills are those basic skills necessary for getting, keeping, and doing well on a job. They are generic in nature and cut across jobs, industry types, and occupations levels. In order to be a productive citizen in the world of work, family, or community involvement, mastery of basic workforce readiness skills is essential for all participants. (For a list of specific career and technical opportunities refer to Appendix.)

CHSVT/VCI Integrated programs: Currently two years old, this program integrates the learning opportunities and environments of the school and industries in real life learning situations. This process provides guidelines to help participants, teachers, and school partners offer school-supervised work-based learning programs. SolidWorks is a computer assisted design program that is a CHSVT technical education course, being taught in a classroom situated within the Wood Shop of VCI. The students begin by learning the basics of the program from a certified teacher, then transition into an apprentice experience directed by VCI to a full time paid job working for VCI as an employee. Students are eligible for Industry certification through this educational experience. This is one example of several that are in process or being developed.

Vermont Correctional Industries: VCI is a traditional industry experience that has been transformed into an educational experience. Workers may be students enrolled in CHSVT and acquiring their career and technical education credits through their learning in the shops. Workers may be interning with the partnership of CHSVT/VCI to complete the requirements for a Workforce Readiness Certificate or learning the trade through full-time employment. All individuals involved in these programs have well defined criteria, job descriptions; and performance expectations that help assure their success.

Reinforcement in the *Habits of Mind*, 21st Century Skills, and Common Career Technical Core standards and behaviors, into the competencies needed to be a success in the workplace, is important to challenge our students to be at the forefront of industry expectations. Over the last year, we have begun to focus on offenders that are in programming (DOC/CHSVT) and are being released within 18 months. By updating and integrating technology we have improved the training provided to offenders.   They now see real world technology using equipment and software such as, CNC machinery, Solid Works, Adobe Creative Suite Digital printing, and a real world production setting. It is important to note, that Vermont Correctional Industries are self-sustaining (funded) programs.

Workforce Development: Currently in development, this program will integrate into the culture of the Department the efforts to develop, educate and prepare offenders to be successful and reduce the rate of recidivism. All 'facility' jobs that are performed by offenders will be structured to follow the tenets of the Workforce Readiness Certificate process.   The intent of the Workforce Readiness Certification is to

recognize a participant's mastery of workforce readiness skills valued by employers, to help participants explore career interests, and to provide a credential of participant mastery. This process allows participants to document their employability skills; employers and teachers to assess the skills they are looking for in quality employees; teachers to customize instruction to help participants overcome their barriers to employment – real or perceived. (See Appendix for Corrections Education Workforce Readiness Certification Process)

Outcomes:

In the past, CHSVT has been measured by the number of diplomas granted. With our changing population over the last eight years, we have seen a gradual reduction in the number of the diplomas granted and a significant increase in the number of Industry certifications and higher paying jobs acquired upon release (Department of Corrections Fact and Figures 2008 – 2013). Students are entering the DOC system with more high school diplomas, however, many are still lacking the technical and job skill development needed to obtain and sustain a job.

As of July 1, 2014, we will be measuring the success of our programs in a defined manner. The attached Outcome-based Evaluation Plan for Corrections Education will give us a much clearer picture of progress and areas in need of improvement.

Logic Model for
Vermont Department of Corrections
Corrections Education
Community High School of Vermont

Inputs	Processes	Outputs	Short-term outcomes	Intermediate outcomes	Long-term outcomes
8 Correctional Facility Campuses 9 Probation Campuses 45 teachers 3 administrators 3 Central Office staff **Approx. $4 million budget** Student Computers Administrative computers SMART boards at all campuses Instructional laptops/tablets	Academic Teaching Career & Tech Teaching Career Counseling Academic Counseling Tutoring Career & Academic Assessment Educational/Career transition planning	Diplomas Certifications Students served Portfolios Resumes Community donations	Increase in functional literacy & numeracy	Increased confidence that learner can manage formal & informal learning environments	Increased reliability and improved judgment
			Increase ability to find appropriate employment	Appropriate employment in jobs based upon previous learning	Salary is sufficient to meet independent living needs
			Increased interest in attending schooling and training	Improved attitude toward self and society	Engaged in community through work and other connections

Outcomes-Based Evaluation Plan for

Vermont Department of Corrections

Corrections Education: Community High School of Vermont

Key:

Yellow: Enrolled in Corrections Education Program
Blue: One year out from program completion
Green: Two – four years from program completion – following cohort from blue.

Outcome	indicator(s)	source of data (records, clients, etc.)	method to collect data (questionnaires, interviews, etc.)	who collects data	when collect data
Increase in functional literacy & numeracy	100% of program completers will meet proficiency requirements in reading, writing and numeracy	CASAS scores SIM Writing records/work Work samples Project based learning samples	Record review	Central Office	Quarterly
Increase ability to find appropriate employment	60% of students enrolled in career exploration & development activities complete the checklist for successful employment	Records	Record Review	Central Office	Quarterly

Increased interest in attending schooling and training	2% increase in case plan compliant in education & training	Attendance records Performance records	Record review	Central Office	Quarterly
Increased confidence that learner can manage formal & informal learning environments	Increase in motivation survey results	Students	Survey	Teachers	Yearly
Appropriate employment in jobs based upon previous learning	Number of completers obtaining employment in career cluster of training	Department of Labor	Unemployment Insurance Report	Central Office	Yearly
Improved attitude toward self and society	Increase compliance with DOC expectations for participants enrolled for 6 months or more	DR History Intermediate Sanctions Case Plan Compliance	Record Review	Central Office	Yearly
Increased reliability and improved judgment	Reduced recidivism	OMS	Record Review	Central Office	Every year for 4 years
Engaged in community through work and other connections	Increased engagement	Community involvement survey	Review of survey results	Central Office	Every year for 4 years
Salary is sufficient to meet independent living needs	Increase in income to meet needs (same cohort from mid-term)	Department of Labor	Unemployment Insurance Report	Central Office	Every year for 3 years beyond mid-term measurement

Data and projections on the student populations, including the total number of students enrolled at the School, the number of students who are currently incarcerated, students ages, and the current cost per student.

Data and projections on the student populations:

In 2012, CHSVT implemented a new Student Information System - FOCUS. Prior to 2012, the system used to collect student data was integrated with the DOC Tiny Term system. The information being collected and entered was only as reliable as the 70+ people entering the information. With FOCUS,

only one person is responsible for entering and verifying the information and data we are collecting. This data collection is being done in line with the state and federal reporting requirements and criteria for the Agency of Education and the Department of Corrections. The information that is available for FY 14 is valid and reliable. With this system of improved data collection, and despite the difference between the two systems, the trends in our student population have remained consistent.

Over the last eight years, the student population has remained relatively stable. On an average daily basis we have had approximately 500 – 600 students. Additionally we have seen between 2,700 and 3,500 unique individuals during those year-long periods participate in education. What has changed and continues to change are the characteristics and make up of our students.

Eight years ago, our population included a large percentage of under 23-year-olds and 40 – 45 year-old males without diplomas. The number of under 23's year olds without a diploma has dropped in the last three years, impacting our eligibility for Federal Title 1 funding. There has been a downward trend in the number of 17 – 23 year olds who are entering the Corrections system without a diploma. It is this same population however, who are lacking in workforce development skills and the technical skills needed to obtain and sustain a job. Our numbers have grown in the 20 – 35-year old range and these individuals are clearly in need of workforce development, career and technical education. Given the trends of our populations, we have students of all ages with a wide variety of needs. Age is less of a factor than the number of people coming in with skill gaps in a variety of areas that are now being measured and documented by the DOC. The number of individuals has not increased nor has the total overall enrollment, but the needs are different and more complex.
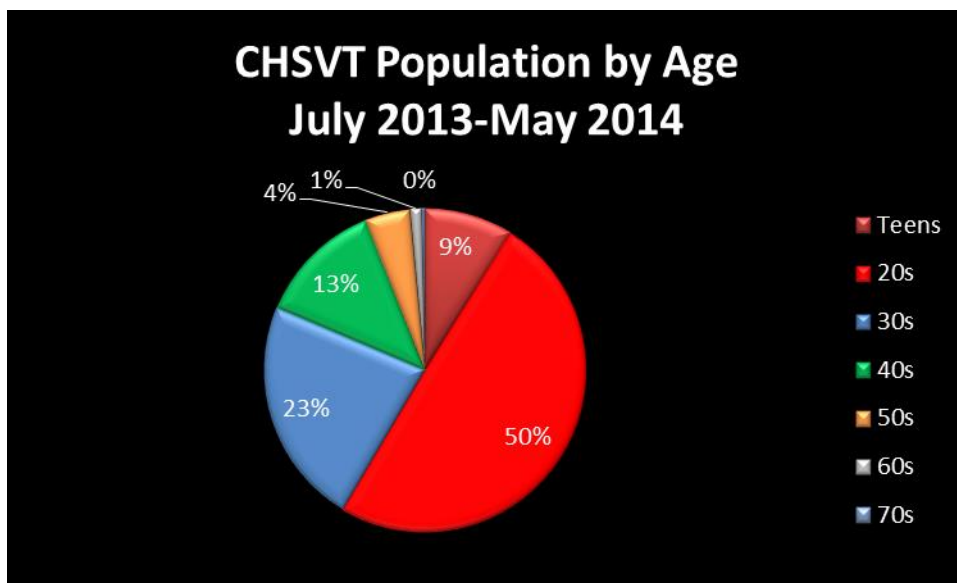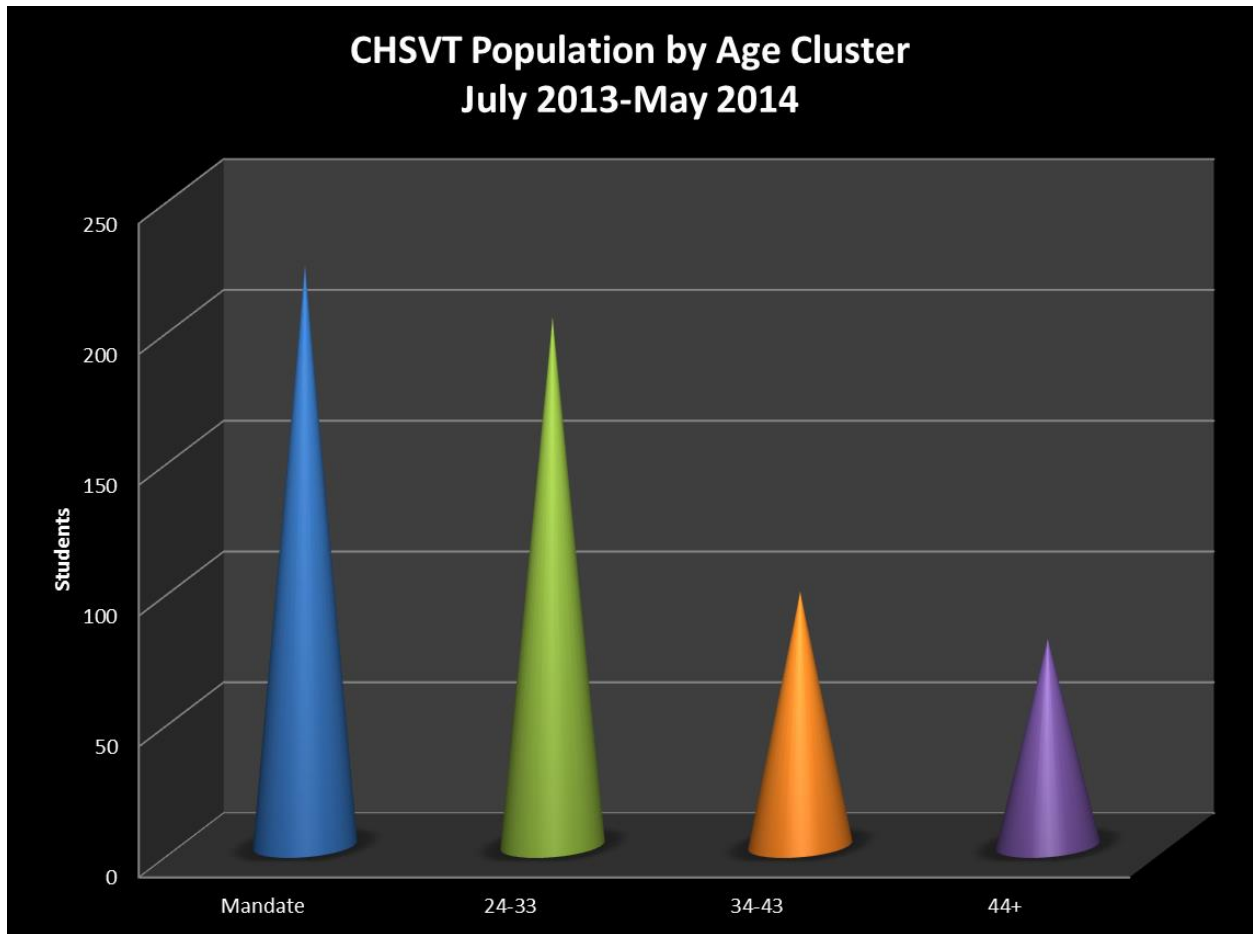
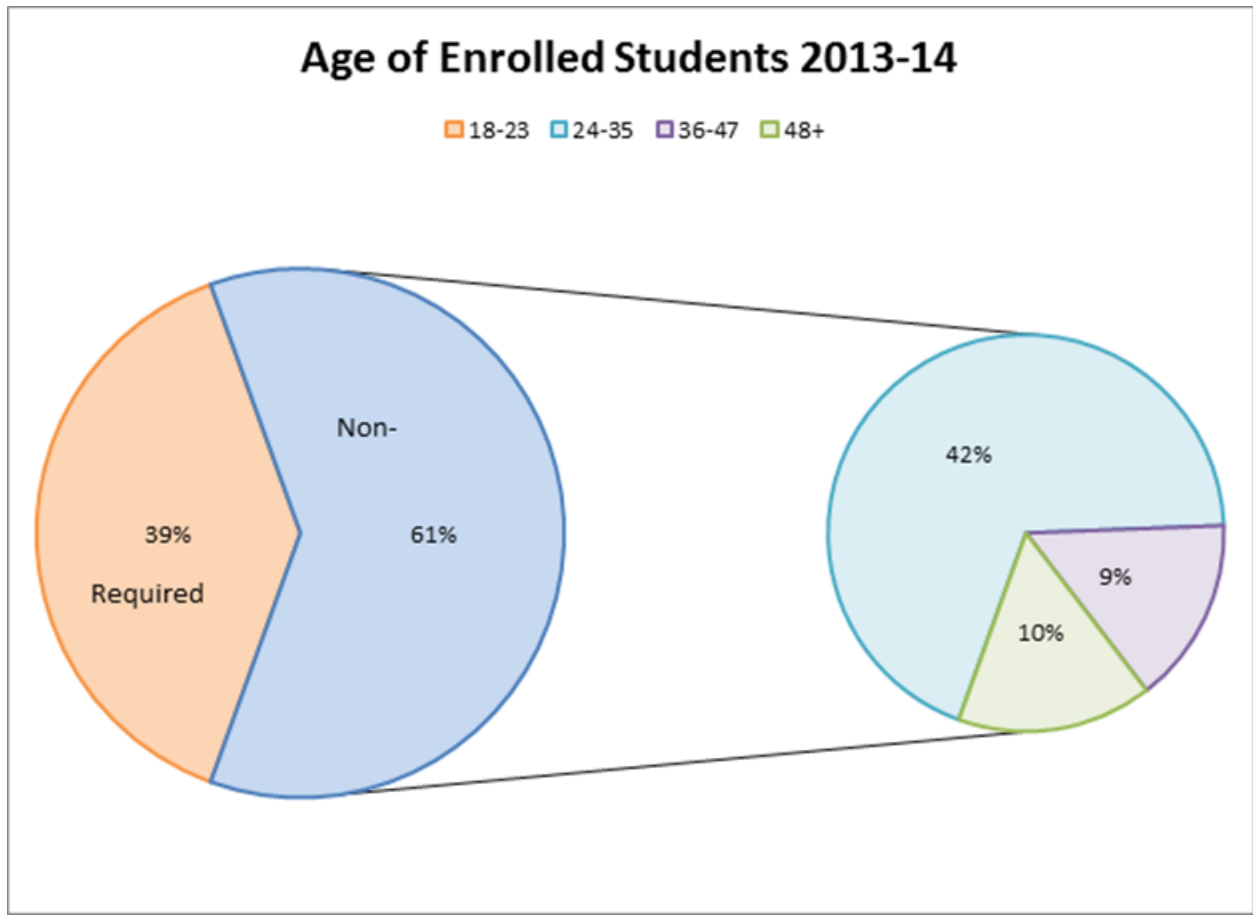Below is the data of our current year's students – July 1, 2013 - June 6, 2014.

Included in this information is the total number of students enrolled in CHSVT.

Total = 600

Incarcerated = 494

Street Campuses= 106

CHSVT Population by Age Cluster
July 2013-May 2014

Students

250

200

150

100

50

0

Mandate   24-33   34-43   44+

CHSVT Population by Age
July 2013-May 2014

4%   1%   0%

9%

13%

23%

50%

- Teens
- 20s
- 30s
- 40s
- 50s
- 60s
- 70s

Age of Enrolled Students 2013-14

■ 18-23 ■ 24-35 ■ 36-47 ■ 48+

Non-
Required
39%
61%

42%
9%
10%

The Cost per student:

A comparison of the School's current cost per student with statewide education spending per student;

The Agency of Education has been consulted; they will be forwarding a comparison of the School's current cost per student with statewide education spending per student.

An analysis of the use of more efficient delivery systems, including technology

Community Campuses: restructured – In a continued effort to provide appropriate flexible pathways for our students, the traditional Community Campuses are being reorganized for the purposes of consolidating resources for optimal programming. Services are provided in accordance with student's Case Plans and Living, Learning, Working Plans. Each Community Campus will have a Transitional Educator assigned, who is responsible for scheduling and connecting students to other schools, outside agencies, work opportunities and/or campuses throughout the State. This may be done via interactive media methods, making connections within the community as well as providing instruction to ensure

that the minimum course of study is covered. A minimum course of study and special education services are available and delivered based on the enrolled student's needs.

Virtual Campuses –Exploring CHSVT's ability to make this option available in those areas where the population does not support a full-time program. This option could be a stand-alone concept or incorporated into the Community Campuses, in concert with other offerings. At the current time, a Request for Information (RFI) has been posted though BGS to ascertain what kind of an operating system and structure would be needed to implement this idea. While we believe the virtual campus concept could be effective and potentially efficient, we do not yet know the cost associated with this model.

Current Technology delivery system - The following is an outline of the current technology delivery system and what the delivery system should be as determined by the Educational Quality Standards and 21st Century Learning Goals.

Current model:

- **Instruction**
    - Teacher led instructions/discussion
    - Limited use of Interactive White Boards (IWBs)
        - Teacher use with presentation software with IWBs
        - Often, instructional videos will be downloaded to flash drive and viewed from flash drive—limited number of direct internet connections
        - Videos most commonly used as supplemental material for teacher instruction/support
        - Commonly, the "interactive" part of the IWBs is overlooked—most classes are instructor use only; some classrooms have students writing on IWB (some math problems, students mark sentences following the SIMS model)
    - Students work at own pace for some classes (O'Leary text, some ServSafe, typing software) with instructional software and additional support from instructors
    - Research is done through outdated references (older versions of encyclopedia software, encyclopedias, etc.) and additional research is done by requesting information from instructors to search online.
    - Technology use is, at best, the "A" level of [Puentadura's SAMR model](#)
    - Strict class schedules (based on "movement windows" and "head counts"), with very little flex-time for additional "office hours" for extra help
- **Computer Labs**
    - Each facility/street campus has a stand-alone network
        - One server per campus, 17 servers total
        - Student workstations networked through local server only
        - No Internet access at the facilities, filtered Internet access at most of the community campuses

- o Each facility/community campus equipped with Windows 7, MS Office 2010, Choices Career Software
- Computer labs have outdated, limited reference software, only a small number of community campuses have access to the Internet for authentic research
  - o Additional software is installed upon administrative approval if instructor requests the software
  - o Student accounts are created when initially signed up for classes
    - Log on credentials/student work is stored on the local server
    - When students transfer to different facility/community campus
      - Identical user account needs to be created on local server
      - Student work is transferred either via e-mail or stored on CD to be hand delivered when student/instructor requests previous student work

21st Century Model:

- **Instruction**
  - o Flexible learning pathways should be offered to _every_ student
  - o We should see instructors in the classrooms helping students with their work/projects/skills (i.e. "flip the classroom")
  - o Students should have access to lessons/materials "anytime, anywhere"
  - o Students should be using 21st Century tools in their learning
  - o Students should be able to conduct authentic, up-to-date research on projects
  - o Online & distance learning should be offered at the community campuses & facilities
  - o Collaboration between students on research projects & homework
- **Computer Labs**
  - o Centralized domain/file server (currently in discussion/process)
    - Eliminates redundancy in user accounts on local servers
    - Eliminates the need to transfer student work when student relocates
    - Offers software consolidation—no need for several campus licenses if we can load software onto server (1 network license vs. 17 campus licenses)
    - Potentially offers Internet access for students' authentic research
    - Potentially offers an internal e-mail system
      - Students can develop their "workability" skills by learning/understanding how to communicate with 21st Century tools
      - Students can collaborate on projects/work
  - o Internet access in labs
    - Offers authentic research opportunities for students
    - Students can access our online & distance learning classes (need for development of classes)
    - Student workstations can be updated with OS & software updates on regular basis

Restrictions and barriers:

Due to security and our physical locations/layouts, there are some restrictions that prevent the instructors at CHSVT from teaching 21st Century skills and using a full complement of 21st Century tools.

- **Instruction**
    - Limited Internet connectivity
        - Instructors have Internet capability, but students are limited (several community campuses only)
        - Educational videos must be downloaded to a flash drive so the instructors can then show them to students
            - Students have no additional means to review these videos
            - Students have no way to search for instructional videos (facilities)
            - Students are limited in their search for instructional videos (community campuses)
            - Requires additional time/effort on the part of the instructor to present these 21st Century learning tools
        - Students at the facilities must use outdated e-resources or other text resources to conduct research
        - Students at the campuses are limited in their search for authentic research
    - IWBs are not used to their full potential
        - Limitations on usage of external web links—no/limited Internet connection
    - WiFi does not generally exist and there is limited iPad functionality
    - Text books required, no opportunity to distribute e-books to students
- **Computer Labs**
    - 17 Stand-alone networks require additional work to maintain
    - Each lab outfitted with "basic" software (MS Office, Choices, MoneySmart), but additional educational software must be purchased as individual campus licenses, this drastically increases the cost of software purchases for CHSVT
    - No Internet connectivity in facilities
        - No software updates—especially to the OS & anti-virus software
        - No means of authentic research
        - CTE (VCI: Auto, Print, Wood, etc.) labs go without needed updates to professional software
        - Open only during specific hours—students unable to access classroom materials "anytime, anywhere"
    - Students unable to improve their communication skills—especially in regards to e-mail communication/collaboration

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Career Cluster	Coursework, Industry Recognized Credential (IRC)	Timeframes (May vary by student)	CHSVT Campus	Work- based Learning Activity	Action Steps
Occupational Safety	Occupational Safety and Health (OSHA)	-10 Hour General Industry -10 hour Construction	All Campuses	*Earning necessary credential for industry readiness*	Currently five instructors on staff are certified OSHA outreach instructors Need to keep up instructor certifications Certify one more instructor in FY'15 needs to be paid from GF – not Perkins eligible
	First Aid/CPR/AED	10 Hours	All campuses	*Earning necessary credential for industry readiness*	Currently two instructors are certified Certify two more instructors in FY'15 through Perkins
Architecture, Construction, & Manufacturing	Solid Works	8 – 12 months	-Northern State	Design projects for facility needs, VCI, Welding, Automotive	Internet capability for testing and software upgrades & installs RFI for CHSVT Instructional Network sent to DII 6/14
	Master Cam CNC Machining	8-12 Months	Northern State	Furniture cuts on CNC machine	Explore CNC Operators course currently offered at Lyndon Institute
	National Center for Construction Education and Research (NCCER) Core Curriculum, Painting, Construction 1 & 2	3 -6 months	Southeast State, Chittenden, Northwest, Northern	Varies depending on campus and available projects	Maintain Accredited Training Unit status Current have four certified instructors adding four more in FY'15 through Perkins

Career Cluster	Coursework, Industry Recognized Credential (IRC)	Timeframes (May vary by student)	CHSVT Campus	Work- based Learning Activity	Action Steps
	(Furniture Manufacturing through VCI) NCCER Construction 1 & 2	6 – 18 months (+)	Northern State	Building furniture	Increase number of hands-on certifications
	VCI –Metalworking (signs) NCCER Sheet Metal	6 – 18 months (+)	Northern State	Sign work	Connect to American Welding Society coursework
	VCI - Upholstery	6 – 18 months (+)	Northern State	Production & sales	Possible Apprenticeship Program through NCCER
Automotive Technology	National Automotive Technicians Education Foundation (NATEF) Student Achievement Certificate	3-24 months depending on certification(s)	-Northwest State	DOC Post vehicle maintenance, Harley Time course, forest & parks vehicles	Work-based learning projects, Internet capability for testing Complete NATEF Students Achievement Certification
	General Service Technician Certification	3-12 months	Northwest	Vehicle Maintenance	
	Safety and Pollution Prevention (S/P2)	1- 3 months	Northwest		SP2 online necessary
	Vermont State Inspection Certification	1- 3 months	Northwest		

Career Cluster	Coursework, Industry Recognized Credential (IRC)	Timeframes (May vary by student)	CHSVT Campus	Work- based Learning Activity	Action Steps
	All Data		NWSCF		
Automotive Technology (cont'd)					
	Harley Time (not an IRC)	6 months	-Chittenden Campus -NWSCF campus	Harley Davidson M/C rebuilds	Harley Technician instructors,
Engineering & Technical Systems, Manufacturing	American Welding Society	6-12 months depending on certification(s)	Northern State	NCCER hands-on certification, AWS coupons	Space is an issue explore larger classroom options
	ASE Automotive Welding & Auto Body	6-12 months	Northwest State	Facility projects & vehicle repair – Harley Rebuild	

Community High School of Vermont Career and Technical Education Action Plan FY'15

Career Cluster	Coursework, Industry Recognized Credential (IRC)	Timeframes (May vary by student)	CHSVT Campus	Work- based Learning Activity	Action Steps
Culinary, Hospitality & Tourism	Serve Safe	20 hours	All	Kitchen work to apply learning	
	Manage First	6 – 8 months	-Northwest State -CRCF -SAPP@NW Tech	Kitchen work to apply learning	
	Pro Start Level 1 & 2	3- 6 months level 1 3-6 months level 2	-Southern State	Kitchen work to apply learning	Continue to define and operate a culinary academy to train facility kitchen workers
Arts, A/V Technology, Communications, & Information Technology	VCI - Printing	6 – 18 months (+)	Northern State	Production & sales	Explore PrintEd and other career cluster Industry Recognized Credentials (IRC)

Career Cluster	Coursework, Industry Recognized Credential (IRC)	Timeframes (May vary by student)	CHSVT Campus	Work- based Learning Activity	Action Steps
Agriculture, Food, & Natural Resources	Master Composter	3 months	SESCF	Facility composting	Building composting system to meet state standards
	Master Gardener	6-12 months	NSCF, NWSCF, CRCF, SESCF, SSCF	Facility gardens, community service projects	Windsor Green House's will be operating by fall of '14

Coordination, Continuity, Consistency:

Community High School of Vermont
Curriculum Framework

CHSVT

Living, Learning, Working

December 2012

The mission of the Community High School of Vermont is to provide an accredited, coordinated and personalized education that assists students in their academic, social, and vocational successes.

CHSVT is recognized as an International Habits of Mind Learning Community of Excellence by The Institute for Habits of Mind.

CHSVT is an accredited independent high school by the New England Association of Schools and Colleges.

CHSVT is acknowledged as an accredited independent high school by the Vermont State Board of Education.

Table of Contents

Introduction

Community High School of Vermont is primarily designed to serve individuals who:

- Are under the custody of the Vermont Department of Corrections.
- Have a high need in the areas of education or employment, as identified by the classification procedures of the Vermont Department of Corrections.

Under Vermont State Law (28VSA120), all individuals under custody, under 23 years of age, without a high school diploma, have a mandatory education requirement. These students are enrolled upon admission. The school also serves special education needs of students with disabilities with certified teachers.

Goals of the Curriculum: The student will be able to demonstrate, preferably through authentic performance assessments, his/her attainment of the school's core requirements in the areas of living, learning and working. While this document does not specify specific course progressions in any of the content areas, it is an expectation that students will take courses designed to meet their individual needs, to expose them to a broad range of concepts, and to take a progression of courses showing growth over time.

Objectives

1. **Student Attendance:** Students will re–engage in educational coursework and comply with the structure of a disciplined learning environment.
2. **Students attain foundational knowledge and meet Proficiency Requirements.** This is measured by student progress on the Proficiency Requirement worksheet. Students will show demonstration of at least 8th grade level skills in reading, writing and numeracy. Students on an IEP or 504 Plan will meet accommodations as written to fulfill this requirement.
3. **Student progress toward and the completion of secondary education, culminating with the award of a high school diploma.** Faculty teaching teams, in collaboration with students, develop an individualized Graduation Plan leading to a high school diploma.
4. **Students' skills are marketable to the business and industry community.** This is measured by the students' attainment of workplace competencies, completion of work-based learning, and industry certifications. Industry education courses award industry certification upon completion of the industry standards and/or assessments. Through Career & Technical Education students will show an increase in their ability to obtain and maintain employment and advance in the workplace.

Student Learning Outcomes (SLOs)

1. Students will exhibit critical thinking.
2. Students will articulate thoughts by means of various modes of communication.
3. Students will analyze their own actions and work effectively with others in groups, society, and culturally diverse situations.
4. Students will plan for the future through utilization of knowledge of responsible choices.

Individualized Learning Plans: Any student enrolled at CHSVT will complete a self-assessment regarding their likes, dislikes, strengths, weaknesses and goals. Transcripts from previous schools are acquired and an individual learning plan is developed based on previous courses completed against the CHSVT course matrix and graduation requirements and meeting the SLOs.

Comprehensive Assessment Plan: All new students are given a CASAS (Comprehensive Adult Student Assessment System) assessment which provides benchmarks for reading and math abilities. Students are placed in the appropriate level instruction. The CASAS is then administered every quarter to measure progress growth.

Students take additional assessments within individual classes. Students also have the opportunity to take assessments to earn national certification in trades education programs.

***Graduation Requirements*:**

Accumulation of Credits

Subject	Number of Credits	Subject	Number of Credits
English/Language Arts	**4**	Math	**3**
Science	**3**	Social Studies/History	**3** *1 credit of US History required
Career/Technical Education	**3**	Health Education	**2** *1 credit of Physical Education and I credit of Health required
Computer Studies	**1**	Fine Arts	**1**
Electives (from any of the above or other unassigned subjects)			**2**
TOTAL			**22**

Demonstration of Proficiency
    a. Reading
        i. *Grade level 8 or above on nationally normed test of reading, OR*
        ii. *Valid and reliable evidence demonstrating 8th grade or higher in standards for reading.*
    b. Writing
        i. *Grade level 8 or above on nationally normed test for writing, OR*
        ii. *Valid and reliable evidence demonstrating 8th grade or higher in standards for writing.*
    c. Numeracy
        i. *Grade level 8 or above on nationally normed test of mathematics, OR*
        ii. *Valid and reliable evidence demonstrating 8th grade or higher in standards for mathematics.*

While our credit and proficiency requirements clearly relate to learning and working skills, our status as a mindful school and our use of Habits of Mind help us to develop important life skills that will benefit our students as learners, workers and citizens in the community outside of school.

Using the CHSVT Curriculum Framework

Purpose

A framework provides the structure plan upon which one can build something. In this case, a curriculum framework provides the necessary components upon which a teacher may build courses to support students as they progress through our school's requirements. The CHSVT Curriculum Framework is adapted from Bradby, D., Pedroso, R., and Rogers, A. (2007). *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)* (NCES 2007-341). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Bradby, Pedroso and Rogers offer the following in the forward of their publication:

> Education agencies and institutions collect and maintain information to help the education system function efficiently and effectively. Standardized data available to education agency officials can

> - assist in the development of sound educational policies at all levels;
> - improve the quality of instruction and boost student achievement;
> - help compare information among communities and among states;
> - improve the accuracy and timeliness of nationwide summaries of information about education systems;
> - improve the quality and significance of education research—locally, statewide, and nationwide; and
> - enhance reporting to the public about the condition and progress of education.

> It is the intent of *Secondary School Course Classification System: School Codes for the Exchange of Data (SCED)* to provide educators and data managers with a tool that will support decision-making in these ways.

CHSVT Curriculum

What follows is a listing of the necessary components for building courses at CHSVT. We will call them, Course Component Descriptions (CCD). Each CCD describes the requirements for 1.0 credit, unless otherwise noted.

As you design classes, they must be built upon one or more CCD. You are encouraged to develop multidisciplinary classes that are engaging and allow for authentic experiences for your students. The CCDs help define the content of the class; however, your credit criteria must incorporate Habits of Mind, Common Core Standards and/or 21st Learning Expectations.

The CCDs are organized based upon subject foci that are in turn organized in subject areas that correspond to requirements for graduation. Below is the exhaustive list of subject areas:

Subject area	Code
English Language and Literature	01
Mathematics	02
Life and Physical Sciences	03
Social Sciences and History	04
Fine and Performing Arts	05
Foreign Language and Literature	06
Physical, Health, and Safety Education	08
Computer and Information Sciences	10
Communications and Audio/Visual Technology	11
Business and Marketing	12
Manufacturing	13
Hospitality and Tourism	16
Architecture and Construction	17
Agriculture, Food, and Natural Resources	18
Transportation, Distribution and Logistics	20
Engineering and Technology	21
Personal Development/Transition	22

English Language and Literature

Comprehensive Language Arts

English/Language Arts I 01001

English/Language Arts I courses build upon students' prior knowledge of grammar, vocabulary, word usage, and the mechanics of writing and usually include the four aspects of language use: reading, writing, speaking, and listening. Typically, these courses introduce and define various genres of literature, with writing exercises often linked to reading selections.

English/Language Arts II 01002

English/Language Arts II courses usually offer a balanced focus on composition and literature. Typically, students learn about the alternate aims and audiences of written compositions by writing persuasive, critical, and creative multi-paragraph essays and compositions. Through the study of various genres of literature, students can improve their reading rate and comprehension and develop the skills to determine the author's intent and theme and to recognize the techniques used by the author to deliver his or her message.

English/Language Arts III 01003

English/Language Arts III courses continue to develop students' writing skills, emphasizing clear, logical writing patterns, word choice, and usage, as students write essays and begin to learn the techniques of writing research papers. Students continue to read works of literature, which often form the backbone of the writing assignments. Literary conventions and stylistic devices may receive greater emphasis than in previous courses.

English/Language Arts IV 01004

English/Language Arts IV courses blend composition and literature into a cohesive whole as students write critical and comparative analyses of selected literature, continuing to develop their language arts skills. Typically, students primarily write multi-paragraph essays, but they may also write one or more major research papers.

Language Arts Laboratory 01009

Language Arts Laboratory courses provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

Literature/Reading

Literature 01053

Literature courses offer the opportunity for students to study and reflect upon the themes presented in the body of literature being presented. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the reading selection and as they understand how the work reflects society's problems and culture. Oral discussion is an integral part of literature courses, and written compositions are often required. Literature courses may survey representative works, reflect a particular genre or a specific theme, or survey works of a particular time or people.

American Literature 01054

American Literature courses focus upon commonly known American authors and their work. Students improve their critical-thinking skills as they determine the underlying assumptions and values within the selected works and as they understand how the literature reflects the society of the time. Oral discussion is an integral part of literature courses, and written compositions are often required.

Strategic Reading 01066

Strategic Reading courses are intended to improve a student's vocabulary, critical-thinking and analysis skills, or reading rate and comprehension level. Although these courses typically emphasize works of fiction, they may also include works of nonfiction (including textbooks). Strategic Reading courses often have a time-management focus, offering strategies for note-taking or for understanding and evaluating the important points of a text.

Assisted Reading 01067

Assisted Reading courses offer students the opportunity to focus on their reading skills. Assistance is targeted to students' particular weaknesses and is designed to bring students' reading comprehension up to the desired level or to develop strategies to read more efficiently.

Corrective Reading 01068

Corrective Reading courses offer diagnostic and remedial activities designed to correct reading difficulties and habits that interfere with students' progress in developing reading skills and understandings. Activities are chosen to increase or improve students' reading comprehension, reading technique, and general literacy skills.

Composition/Writing

Composition 01103

Composition courses focus on students' writing skills and develop their ability to compose different types of papers for a range of purposes and audiences. These courses enable students to explore and practice descriptive, narrative, persuasive, or expositive styles as they write paragraphs, essays, letters, applications, formal documented papers, or technical reports. Although composition courses may present some opportunities for creative writing, their focus usually remains on nonfiction, scholarly, or formal writing.

Creative Writing 01104

Creative Writing courses offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the courses is on writing; however, students may study exemplary representations and authors to obtain a fuller appreciation of the form and craft. Although most creative writing classes cover several expressive forms, others concentrate exclusively on one particular form (such as poetry or playwriting).

Research/Technical Writing 01105

Research/Technical Writing classes prepare students to write research papers and/or technical reports. These classes emphasize researching (primary and secondary sources), organizing (material, thoughts, and arguments), and writing in a persuasive or technical style.

Communications 01155

Communications courses focus on the application of written and oral communication skills through a variety of formal and informal experiences. The courses are performance-based and emphasize effective interpersonal and team-building skills. Communications courses may also involve the study of how interpersonal communications are affected by stereotypes, nonverbal cues, vocabulary, and stylistic choices.

Applied English and Communications 01156

Applied English and Communications courses teach students communication skills—reading, writing, listening, speaking—concentrating on "real-world" applications. These courses usually emphasize the practical application of communication as a business tool—using technical reports and manuals, business letters, resumes, and applications as examples—rather than emphasize language arts skills as applied to scholarly and literary materials.

Other

English Morphology and Grammar 01201

> English Morphology and Grammar courses involve the study of the English language—its roots and derivations, structure and sentence patterns, dialects, writing and spelling systems, and uses as a communication tool.

History of the English Language 01202

> History of the English Language courses trace the development of English, concentrating on historical and cultural influences and how the language has changed over time. Although language roots, structures, and dialects may be examined, the emphasis remains on the process of language development rather than on morphology.

English—Test Preparation 01203

> English—Test preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking. Topics covered include vocabulary, reading comprehension, and writing strategies, as well as time management, scoring procedures, and dealing with stress. Course materials may include ACT, SAT and PSAT review materials, current assessment software programs, and previous standardized examinations.

English Proficiency Development 01992

> English Proficiency Development courses are designed to assist students in acquiring the skills necessary to meet proficiency requirements.

Mathematics

Foundation Mathematics

Informal Mathematics 02001

> Informal Mathematics courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and highlight the connections among mathematical topics and between mathematics and other disciplines. These courses approach the teaching of general math, pre-algebra, and pre-geometry topics by applying numbers, and algebraic and geometric concepts and relationships to real world problems.

General Math 02002

> General Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

Pure Mathematics

Pre-Algebra 02051

> Pre-Algebra courses increase students' foundational math skills and prepare them for Algebra I by covering a variety of topics, such as properties of rational numbers (i.e., number theory), ratio, proportion, estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first-degree equations and inequalities.

Algebra I 02052

> Algebra I courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Algebra I—Part 1 (.50 credit) 02053

The first part in a multi-part sequence of Algebra I. This course generally covers the same topics as the first semester of Algebra I, including the study of properties of rational numbers (i.e., number theory), ratio, proportion, and estimation, exponents and radicals, the rectangular coordinate system, sets and logic, formulas, and solving first degree equations and inequalities.

Algebra I—Part 2 (.50 credit) 02054

The second part in a multi-part sequence of Algebra I. This course generally covers the same topics as the second semester of Algebra I, including the study of properties of the real number system and operations, evaluating rational algebraic expressions, solving and graphing first degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratics.

Algebra II 02056

Algebra II course topics typically include field properties and theorems; set theory; operations with rational and irrational expressions; factoring of rational expressions; in-depth study of linear equations and inequalities; quadratic equations; solving systems of linear and quadratic equations; graphing of constant, linear, and quadratic equations; properties of higher degree equations; and operations with rational and irrational exponents.

Integrated Math—multi-year equivalent (1-3 credits) 02061

Integrated Math courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and emphasize the connections among mathematical topics and between mathematics and other disciplines. The multi-period sequence of Integrated Math replaces the traditional Algebra I, Geometry, Algebra II sequence of courses, and usually covers the following topics during a three- or four-year sequence: algebra, functions, geometry from both a synthetic and an algebraic perspective, trigonometry, statistics and probability, discrete mathematics, the conceptual underpinnings of calculus, and mathematical structure.

Informal Geometry 02071

Informal Geometry courses emphasize a practical approach to the study of geometry and de-emphasize an abstract, formal approach. Topics typically include properties of and work with plane and solid figures; inductive methods of reasoning and use of logic; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

Geometry 02072

Geometry courses, emphasizing an abstract, formal approach to the study of geometry, typically include topics such as properties of plane and solid figures; deductive methods of reasoning and use of logic; geometry as an axiomatic system including the study of postulates, theorems, and formal proofs; concepts of congruence, similarity, parallelism, perpendicularity, and proportion; and rules of angle measurement in triangles.

Analytic Geometry 02073

Analytic Geometry courses include the study of the nature and intersection of lines and planes in space, including vectors, the polar coordinate system, equations and graphs of conic sections, rotations and transformations, and parametric equations.

Number Theory (.25-.50 credit) 02101

Number Theory courses review the properties and uses of integers and prime numbers, and extend this information to congruences and divisibility.

Discrete Mathematics 02102

> Discrete Mathematics courses include the study of topics such as number theory, discrete probability, set theory, symbolic logic, Boolean algebra, combinatorics, recursion, basic algebraic structures and graph theory.

Trigonometry 02103

> Trigonometry courses prepare students for eventual work in calculus and typically include the following topics: trigonometric and circular functions; their inverses and graphs; relations among the parts of a triangle; trigonometric identities and equations; solutions of right and oblique triangles; and complex numbers.

Math Analysis 02104

> Math Analysis courses include the study of polynomial, logarithmic, exponential, and rational functions and their graphs; vectors; set theory; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity. They may also include some study of trigonometry and/or pre-calculus topics.

Pre-Calculus 02110

> Pre-Calculus courses combine the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.

Calculus 02121

> Calculus courses include the study of derivatives, differentiation, integration, the definite and indefinite integral, and applications of calculus. Typically, students have previously attained knowledge of pre-calculus topics (some combination of trigonometry, elementary functions, analytic geometry, and math analysis).

Applied Mathematics

General Applied Math 02151

> General Applied Math courses reinforce general math skills, extend these skills to include some pre-algebra and algebra topics, and use these skills in a variety of practical, consumer, business, and occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.

Occupationally Applied Math 02152

> Occupationally Applied Math courses reinforce general math skills, extend these skills to include some pre-algebra and algebra topics, and use these skills primarily in occupational applications. Course topics typically include rational numbers, measurement, basic statistics, ratio and proportion, basic geometry, formulas, and simple equations.

Technical Math 02153

> Technical Math courses extend students' proficiency in mathematics, and often apply these skills to technical and/or industrial situations and problems. Technical Math topics may include but are not limited to rational numbers, systems of measurements, tolerances, numerical languages, geometry, algebra, statistics, and using tables, graphs, charts, and other data displays. Technology is integrated as appropriate.

Business Math 02154

> Business Math courses reinforce general math skills, emphasize speed and accuracy in computations, and use these skills in a variety of business applications. Business Math courses reinforce general math topics (e.g., arithmetic, measurement, statistics, ratio and proportion, exponents, formulas, and simple equations) by applying these skills to business problems and situations; applications might include wages, hourly rates, payroll deductions, sales, receipts, accounts payable and receivable, financial reports, discounts, and interest.

Consumer Math 02157

> Consumer Math courses reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications typically include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment.

Probability and Statistics

Probability and Statistics 02201

> Probability and Statistics courses introduce the study of likely events and the analysis, interpretation, and presentation of quantitative data. Course topics generally include basic probability and statistics: discrete probability theory, odds and probabilities, probability trees, populations and samples, frequency tables, measures of central tendency, and presentation of data (including graphs). Course topics may also include normal distribution and measures of variability.

Inferential Probability and Statistics 02202

> Probability and Statistics courses focus on descriptive statistics, with an introduction to inferential statistics. Topics typically include event probability, normal probability distribution, collection and description of data, frequency tables and graphs, measures of central tendency and variability, random variables, and random sampling. Course topics may also include covariance and correlation, central limit theorem, confidence intervals, and hypothesis testing.

Other Mathematics

History of Math 02991

> History of Math courses include a study of the historical development of numbers, computation, algebra, and geometry. Figures critical to the development of mathematics (e.g., Pythagoras, Pascal, Descartes) or important developments (e.g., pi, decimal fractions, probability theory, calculus) often form the backbone of these classes.

Mathematics—Test Preparation 02993

> Mathematics—Test Preparation courses provide students with activities in analytical thinking and with the skills and strategies associated with standardized test taking (such as the PSAT, SAT, and ACT). Topics covered include strategies for arithmetic, algebra, geometry, and quantitative comparison problems as well as time management, scoring procedures and calculator usage.

Mathematics Proficiency Development 02994

> Mathematics Proficiency Development courses are designed to assist students in acquiring the skills necessary to meet proficiency requirements.

Life and Physical Sciences

Earth/Space Science

Earth Science 03001

Earth Science courses offer insight into the environment on earth and the earth's environment in space. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the earth, these courses usually explore oceanography, geology, astronomy, meteorology, and geography.

Geology 03002

Geology courses provide an in-depth study of the forces that formed and continue to affect the earth's surface. Earthquakes, volcanoes, and erosion are examples of topics that are presented.

Environmental Science 03003

Environmental Science courses examine the mutual relationships between organisms and their environment. In studying the interrelationships among plants, animals, and humans, these courses usually cover the following subjects: photosynthesis, recycling and regeneration, ecosystems, population and growth studies, pollution, and conservation of natural resources.

Astronomy 03004

Astronomy courses offer students the opportunity to study the solar system, stars, galaxies, and interstellar bodies. These courses usually introduce and use astronomic instruments and typically explore theories regarding the origin and evolution of the universe, space, and time.

Marine Science 03005

Courses in Marine Science focus on the content, features, and possibilities of the earth's oceans. They explore marine organisms, conditions, and ecology and sometimes cover marine mining, farming, and exploration.

Meteorology 03006

Meteorology courses examine the properties of the earth's atmosphere. Topics usually include atmospheric layering, changing pressures, winds, water vapor, air masses, fronts, temperature changes and weather forecasting.

Earth and Space Science 03008

Earth and Space Science courses introduce students to the study of the earth from a local and global perspective. In these courses, students typically learn about time zones, latitude and longitude, atmosphere, weather, climate, matter, and energy transfer. Advanced topics often include the study of the use of remote sensing, computer visualization, and computer modeling to enable earth scientists to understand earth as a complex and changing planet.

Biology

Biology 03051

Biology courses are designed to provide information regarding the fundamental concepts of life and life processes. These courses include (but are not restricted to) such topics as cell structure and function, general plant and animal physiology, genetics, and taxonomy.

Biology—Advanced Studies 03052

Usually taken after a comprehensive initial study of biology, Biology—Advanced Studies courses cover biological systems in more detail. Topics that may be explored include cell organization, function, and reproduction; energy transformation; human anatomy and physiology; and the evolution and adaptation of organisms.

Anatomy and Physiology 03053

Usually taken after a comprehensive initial study of biology, Anatomy and Physiology courses present the human body and biological systems in more detail. In order to understand the structure of the human body and its functions, students learn anatomical terminology, study cells and tissues, explore functional systems (skeletal, muscular, circulatory, respiratory, digestive, reproductive, nervous, and so on), and may dissect mammals.

Botany 03058

Botany courses provide students with an understanding of plants, their life cycles, and their evolutionary relationships.

Genetics 03059

Genetics courses provide students with an understanding of general concepts concerning genes, heredity, and variation of organisms. Course topics typically include chromosomes, the structure of DNA and RNA molecules, and dominant and recessive inheritance and may also include lethal alleles, epistasis and hypostasis, and polygenic inheritance.

Microbiology 03060

Microbiology courses provide students with a general understanding of microbes, prokaryotic and euaryotic cells, and the three domain systems. Additional topics covered may include bacterial control, cell structure, fungi, protozoa, viruses and immunity, microbial genetics, and metabolism.

Zoology 03061

Zoology courses provide students with an understanding of animals, the niche they occupy in their environment or habitat, their life cycles, and their evolutionary relationships to other organisms. These courses should also help students develop an awareness and understanding of biotic communities.

Chemistry

Chemistry 03101

Chemistry courses involve studying the composition, properties, and reactions of substances. These courses typically explore such concepts as the behaviors of solids, liquids, and gases; acid/base and oxidation/reduction reactions; and atomic structure. Chemical formulas and equations and nuclear reactions are also studied.

Chemistry—Advanced Studies 03102

Usually taken after a comprehensive initial study of chemistry, Chemistry—Advanced Studies courses cover chemical properties and interactions in more detail. Advanced chemistry topics include organic chemistry, thermodynamics, electrochemistry, macromolecules, kinetic theory, and nuclear chemistry.

Organic Chemistry 03103

Organic Chemistry courses involve the study of organic molecules and functional groups. Topics covered may include nomenclature, bonding molecular structure and reactivity, reaction mechanisms, and current spectroscopic techniques.

Physical Chemistry 03104

Usually taken after completing a calculus course, Physical Chemistry courses cover chemical kinetics, quantum mechanics, molecular structure, molecular spectroscopy, and statistical mechanics.

Conceptual Chemistry 03105

Conceptual Chemistry courses are practical, nonquantitative chemistry courses designed for students who desire an understanding of chemical concepts and applications.

Physics

Physics 03151

Physics courses involve the study of the forces and laws of nature affecting matter, such as equilibrium, motion, momentum, and the relationships between matter and energy. The study of physics includes examination of sound, light, and magnetic and electric phenomena.

Physics—Advanced Studies 03152

Usually taken after a comprehensive initial study of physics, Physics—Advanced Studies courses provide instruction in laws of conservation, thermodynamics, and kinetics; wave and particle phenomena; electromagnetic fields; and fluid dynamics.

Principles of Technology 03153

Principles of Technology courses focus on the study of the forces and laws of nature and their application to modern technology. Equilibrium, motion, momentum, energy conversion, electromagnetism, and optical phenomena are presented in the context of current, real-world applications. Demonstrations, math labs, and applied laboratory experiments are an integral part of the Principles of Technology curriculum. These courses enable students to gain a solid foundation for careers in electronics, robotics, telecommunications, and other technological fields.

Physical Science 03159

Physical Science courses involve study of the structures and states of matter. Typically (but not always) offered as introductory survey courses, they may include such topics as forms of energy, wave phenomenon, electromagnetism, and physical and chemical interactions.

Conceptual Physics 03161

Conceptual Physics courses introduce students to the use of chemicals, characteristic properties of materials, and simple mechanics to better describe the world and nonliving matter. The courses emphasize precise measurements and descriptive analysis of experimental results. Topics covered may include energy and motion, electricity, magnetism, heat, the structure of matter, and how matter reacts to materials and forces.

Integrated/Other

Integrated Science 03201

The specific content of Integrated Science courses varies, but they draw upon the principles of several scientific specialties—earth science, physical science, biology, chemistry, and physics—and organize the material around thematic units. Common themes covered include systems, models, energy, patterns, change, and constancy. These courses use appropriate aspects from each specialty to investigate applications of the theme.

Unified Science 03202

Unified Science courses combine more than one branch of science into a cohesive study or may integrate science with another discipline. General scientific concepts are explored, as are the principles underlying the scientific method and experimentation techniques.

Applied Biology/Chemistry 03203

Applied Biology/Chemistry courses integrate biology and chemistry into a unified domain of study and present the resulting body of knowledge in the context of work, home, society, and the environment, emphasizing field and laboratory activities. Topics include natural resources, water, air and other gases, nutrition, disease and wellness, plant growth and reproduction, life processes, microorganisms, synthetic materials, waste and waste management, and the community of life.

Technological Inquiry 03204

> Technological Inquiry courses provide students with an understanding of the use of process skills as an integral part of scientific activity and technological development. Students learn how scientific phenomena are explained, measured, predicted, organized, and communicated.

Origins of Science 03205

> Origins of Science courses explore the body of scientific knowledge and discoveries from an historical perspective, wherein students gain an understanding of how one discovery led to others or to entire revolutions of thought. In these courses, original experiments may be replicated, and students may study primary materials.

Aerospace 03209

> Aerospace courses explore the connection between meteorology, astronomy, and flight across and around the earth as well as into outer space. In addition to principles of meteorology (e.g., atmosphere, pressures, winds and jet streams) and astronomical concepts (e.g., solar system, stars, and interplanetary bodies), course topics typically include the history of aviation, principles of aeronautical decision-making, airplane systems, aerodynamics, and flight theory.

Science, Technology, and Society

> Science, Technology, and Society courses encourage students to explore and understand the ways in which science and technology shape culture, values, and institutions and how such factors, in turn, shape science and technology. Topics covered may include how science and technology enter society and how they change as a result of social processes.

Technical Science 03210

> Technical Science courses introduce students to scientific tools and methods and provide an introduction to chemistry and physics. Topics covered typically include measurement conversion, model creation, use of scientific methods, interpretation of atoms, identification of the properties of common compounds, analysis of chemical equations, the impact of force on linear motion, and the study of various physical phenomena and forms of energy.

Scientific Research and Design 03212

> In Scientific Research and Design courses, students conceive of, design, and complete a project using scientific inquiry and experimentation methodologies. Emphasis is typically placed on safety issues, research protocols, controlling or manipulating variables, data analysis, and a coherent display of the project and its outcome(s).

Social Sciences & History

World History & Geography

World Geography

> World Geography courses provide students with an overview of world geography, but may vary widely in the topics they cover. Topics typically include the physical environment; the political landscape; the relationship between people and the land; economic production and development; and the movement of people, goods, and ideas.

World History—Overview

> World History—Overview courses provide students with an overview of the history of human society from early civilization to the contemporary period, examining political, economic, social, religious, military, scientific, and cultural developments. World History—Overview courses may include geographical studies, but often these components are not as explicitly taught as geography.

World History and Geography

In addition to covering the objectives of World History—Overview courses, World History and Geography courses provide an overview of world geography. These courses are often developed in response to increased national concern regarding the importance of geography, and they explore geographical concepts.

Modern World History

Modern World History courses provide an overview of the history of human society in the past few centuries—from the Renaissance period, or later, to the contemporary period—exploring political, economic, social, religious, military, scientific, and cultural developments.

Ancient Civilizations

Ancient Civilizations courses provide a survey of the evolution of society from the ancient Middle East through Greek and Roman civilizations. Typically, in these courses, students study the rise and fall of civilizations and empires, with an emphasis on the legacies they provide to successive societies.

World Area Studies

World Area Studies courses examine the history, politics, economics, society, and/or culture of one or more regions of the world, such as Africa, Europe, Latin America, the former Soviet Union, Far East Asia, and the Middle East. These courses may focus primarily on the history of a particular region or may take an interdisciplinary approach to the contemporary issues affecting the region. Furthermore, these courses may emphasize one particular country (other than the United States), rather than emphasizing a region or continent.

World People Studies

World People Studies courses allow students to study various types of subgroups that have something in common such as religion, gender, or culture. Similar in style to World Area Studies, but focusing on a group of people rather than on a specific region, these courses examine a subgroup's history, politics, economics, and/or culture.

Contemporary World Issues

Contemporary World Issues courses enable students to study political, economic, and social issues facing the world. These courses may focus on current issues, examine selected issues throughout the 20th century, and look at historical causes or possible solutions.

U.S. History

U.S. History—Comprehensive

U.S. History—Comprehensive courses provide students with an overview of the history of the United States, examining time periods from discovery or colonialism through World War II or after. These courses typically include a historical overview of political, military, scientific, and social developments. Course content may include a history of the North American peoples before European settlement.

Early U.S. History

Early U.S. History courses examine the history of the United States from the colonial period to the Civil War or Reconstruction era (some courses end after this period). Some courses include American history before European settlement, while others may begin at the formation of the new nation. These courses typically include a historical overview of political, military, scientific, and social developments.

Modern U.S. History

Modern U.S. History courses examine the history of the United States from the Civil War or Reconstruction era (some courses begin at a later period) through the present time. These courses typically include a historical review of political, military, scientific, and social developments.

State-Specific Studies (does not meet US History requirement)

State-Specific Studies courses examine the history, politics, economics, society, and/or cultures of one state in the United States. This course may focus primarily on the history of that state or may take an interdisciplinary approach to the contemporary issues affecting it.

Contemporary U.S. Issues (meets no more than .25 US History requirement)

Contemporary U.S. Issues courses study the political, economic, and social issues facing the United States, with or without an emphasis on state and local issues. These courses may focus on current issues or may examine selected issues that span throughout the 20th century to the present.

U.S. Ethnic Studies (meets no more than .25 US History requirement)

U.S. Ethnic courses examine the history, politics, economics, society, and/or culture of one or more of the racial/ethnic groups in the United States. These courses may focus primarily on the history of an individual racial/ethnic group or may take a more comprehensive approach to studying the contemporary issues affecting racial/ethnic groups overall.

U.S. Gender Studies (meets no more than .25 US History requirement)

U.S. Gender Studies courses examine the history, politics, economics, and/or culture of gender in U.S. society. These courses may focus primarily on gender relations or may take a more comprehensive approach to studying the contemporary issues related to gender.

Government, Politics, and Law

Particular Topics in U.S. Government

These courses examine a particular topic pertaining to U.S. government and political institutions rather than provide a general overview of the subject. They may concentrate on one of many topics related to governmental structure, function, and purposes, such as the Constitution, the Supreme Court, Congress, or the Office of the President.

Political Science

Political Science courses approach the study of politics from a theoretical perspective, including an examination of the role of government and the nature of political behavior, political power, and political action.

Comparative Government

Comparative Government courses study the basic tenets of government, searching for the differences and similarities among several forms of government. These courses take a comparative approach to the study of government and politics, focusing on how the United States compares with other nations.

International Relations

International Relations courses provide students with an introduction to the relationships that exist among nations, including an examination of the modern state; the foreign policies of nations; the dynamics of nationalism, ideology, and culture; and the role of international organizations. The courses may also emphasize contemporary events.

United States and World Affairs

United States and World Affairs courses provide a study of global interrelationships. Topics covered may include geographic, political, economic, and social issues of a particular country or

region, with an emphasis on how these issues influence (or are influenced by) the way in which the United States relates to other countries in an interdependent world context.

Principles of Democracy

Principles of Democracy courses combine a study of the structure of national, state, and local

U.S. government with an overview of the principles of market economics. Course content may include contemporary U.S. issues. The purpose of these courses is to prepare students to perform effectively as informed citizens.

Civics

Civics courses examine the general structure and functions of American systems of government, the roles and responsibilities of citizens to participate in the political process, and the relationship of the individual to the law and legal system. These courses do not typically delve into the same degree of detail on constitutional principles or the role of political parties and interest groups as do comprehensive courses in U.S. Government.

Law Studies

Law Studies courses examine the history and philosophy of law as part of U.S. society and include the study of the major substantive areas of both criminal and civil law, such as constitutional rights, torts, contracts, property, criminal law, family law, and equity. Although these courses emphasize the study of law, they may also cover the workings of the legal system.

Legal System

Legal System courses examine the workings of the U.S. criminal and civil justice systems, including providing an understanding of civil and criminal law and the legal process, the structure and procedures of courts, and the role of various legal or judicial agencies. Although these courses emphasize the legal process, they may also cover the history and foundation of U.S. law (the Constitution, statutes, and precedents). Course content may also include contemporary problems in the criminal justice system.

Economics

Economics

Economics courses provide students with an overview of economics with primary emphasis on the principles of microeconomics and the U.S. economic system. These courses may also cover topics such as principles of macroeconomics, international economics, and comparative economics. Economic principles may be presented in formal theoretical contexts, applied contexts, or both.

Comparative Economics

Comparative Economics courses offer students an opportunity to study different economies and economic systems, including an examination of various approaches to problems in micro- and macroeconomics.

Social Sciences

Anthropology

Anthropology courses introduce students to the study of human evolution with regard to the origin, distribution, physical attributes, environment, and culture of human beings. These courses provide an overview of anthropology, including but not limited to both physical and cultural anthropology.

Particular Topics in Anthropology

These courses examine a particular topic in anthropology, such as physical anthropology, cultural anthropology, or archeology, rather than provide a more comprehensive overview of the field.

Psychology

> Psychology courses introduce students to the study of individual human behavior. Course content typically includes (but is not limited to) an overview of the field of psychology, topics in human growth and development, personality and behavior, and abnormal psychology.

Particular Topics in Psychology

> These courses examine a particular topic in psychology, such as human growth and development or personality, rather than provide a more comprehensive overview of the field.

Sociology

> Sociology courses introduce students to the study of human behavior in society. These courses provide an overview of sociology, generally including (but not limited to) topics such as social institutions and norms, socialization and social change, and the relationships among individuals and groups in society.

Particular Topics in Sociology

> These courses examine a particular topic in sociology, such as culture and society or the individual in society, rather than provide an overview of the field of sociology.

Social Science

> Social Science courses provide students with an introduction to the various disciplines in the social sciences, including anthropology, economics, geography, history, political science, psychology, and sociology. Typically, these courses emphasize the methodologies of the social sciences and the differences among the various disciplines.

Social Science Research

> Social Science Research courses emphasize the methods of social science research, including statistics and experimental design.

Humanities

Humanities Survey

> Humanities Survey courses provide an overview of major expressions of the cultural heritage of selected western and eastern civilizations. Content typically includes (but is not limited to) the examination of selected examples of art, music, literature, architecture, technology, philosophy, and religion of the cultures studied. These courses may also cover the languages and political institutions of these cultures.

Humanities

> Humanities courses examine and evoke student responses to human creative efforts and the world in particular historical periods and in particular cultures. Course content includes exploration, analysis, synthesis, and various responses to cultural traditions, including viewing, listening, speaking, reading, writing, performing, and creating. The courses may also examine relationships among painting, sculpture, architecture, and music.

Issues of Western Humanities

> Issues of Western Humanities courses introduce students to the study of the cultural heritage of human beings and provide an opportunity to explore our fundamental humanity. The content typically includes definitions of the humanities in relation to history, literature, religion, philosophy, art, music, and architecture and study of the cultures of Greece, Rome, and one or more settings in contemporary periods. Students are asked to analyze and clarify their sense of themselves; examine and clarify their responsibilities in relation to those of others; examine philosophies concerning moral responsibility for the future; and examine philosophies about human mortality.

Philosophy

Philosophy courses introduce students to the discipline of philosophy as a way to analyze the principles underlying conduct, thought, knowledge, and the nature of the universe. Course content typically includes examination of the major philosophers and their writings.

Particular Topics in Philosophy

These courses examine a particular topic in philosophy, such as aesthetic judgment, ethics, cosmology, or the philosophy of knowledge, rather than providing a more general overview of the subject.

Modern Intellectual History

Modern Intellectual History courses provide a historical overview of modern intellectual movements, generally drawing from different disciplines such as political science, economics, and philosophy.

Fine and Performing Arts

Dance

Dance Technique

Dance Technique courses provide students with experience in one or several dance forms (i.e., modern, jazz, ballet, and tap). Initial classes are usually introductory in nature, while the more advanced classes concentrate on improving students' technique and may offer or require experience in choreography and dance evaluation.

Expressive Movement

Expressive Movement courses help develop students' ability to move expressively, without an emphasis on particular dance forms or on developing specific dance techniques.

Dance Appreciation

Dance Appreciation courses expand students' knowledge of dance as an art form and help develop students' ability to evaluate dance performances. Learning the history of one or several dance forms may also be included as a course objective.

Choreography

Choreography courses teach students how to arrange and direct dancers' movements. Course content includes application of the elements and principles of dance, study of historical and contemporary dance from a worldwide perspective, and instruction in critique. Course objectives include developing an appreciation of dance as a communicative art form and self-expression. Students sometimes gain performance experience.

Drama

Introduction to the Theater

Introduction to the Theater courses provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.

Theatre Arts

Theatre arts courses focus on the study and performance of drama including musical theatre. These courses review a wide range of scripted materials, such as plays, screen plays, teleplays,

readers' theatre scripts, dramatic criticism, creation of original dramatic works, and the role of dramatic arts in society. In addition, students will work collaboratively on performances.

Drama—Comprehensive

Drama—Comprehensive courses are intended to help develop students' experience and skill in one or more aspects of theatrical production. Initial courses are usually introductory in nature, providing an overview of the features of drama such as acting, set design, stage management, and so on. The more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.

Exploration in Drama

Exploration in Drama courses are designed to enhance students' understanding of life through the study and performance of dramatic works. They emphasize developing students' ability to express themselves and establish personal criteria for the critical evaluation of drama activities.

Drama—Acting/Performance

Drama—Acting/Performance courses are intended to promote students' experience and skill development in one or more aspects of theatrical production, but they concentrate on acting and performance skills. Initial courses are usually introductory in nature, while the more advanced courses focus on improving technique, expanding students' exposure to different types of theatrical techniques and traditions, and increasing their chances of participating in public productions.

Drama—Stagecraft

Drama—Stagecraft courses are intended to help students develop experience and skill in one or more aspects of theatrical production, but concentrate on stagecraft (such as lighting, costuming, set construction, makeup, stage management, and so on). Initial courses are usually introductory in nature, while more advanced courses concentrate on improving technique, expanding students' exposure to different types of theatrical techniques and traditions and increasing their chances of participating in public productions. These courses may also provide a discussion of career opportunities in the theater.

Directing

Directing courses are intended to improve students' skills in translating a script into a final production and are usually taken after other drama courses. Directing courses enable each student to create an artistic vision and develop a personal aesthetic, by expanding the student's exposure to different types of theatrical techniques and traditions and providing opportunities to direct the performances of others (either in scenes or in a full production).

Playwriting

Playwriting courses are intended to improve students' skills in creating a script suitable for live production and are usually taken after other drama courses. Playwriting courses enable students to develop a personal voice, style, and aesthetic by expanding their exposure to various playwrights and different types of theatrical techniques and traditions. Students are expected to write original scenes, one-act plays, or full productions.

History and Literature of the Theater

History and Literature of the Theater courses explore in depth the structure, elements, and style of dramatic compositions, and, as an extension, how the dramatic literature influenced theatrical production and acting styles throughout history. Some courses may focus more on the literature component than on the theater (with increased emphasis on critique and analysis), but most courses connect these subjects, exploring their interrelationships. Major contributors

(playwrights, directors, and so on) and the architecture of the theater may also be included as topics of study.

Music

Piano

Piano courses introduce students to the fundamentals of music and basic keyboard techniques such as scales, chords, and melodic lines. These courses may also include more advanced keyboard techniques.

Guitar

Guitar courses introduce students to the fundamentals of music and guitar-playing techniques, such as strumming and chords. These courses may also include more advanced guitar-playing techniques.

Individual Technique—Instrumental Music

Individual Technique—Instrumental Music courses provide individuals with instruction in instrumental techniques. These courses may be conducted on either an individual or small group basis.

Chorus

Chorus courses provide the opportunity to sing a variety of choral literature styles for men's and/or women's voices and are designed to develop vocal techniques and the ability to sing parts.

Vocal Ensembles

Vocal Ensemble courses are intended to develop vocal techniques and the ability to sing parts in small ensemble or madrigal groups. Course goals may include the development of solo singing ability and may emphasize one or several ensemble literature styles.

Individual Technique—Vocal Music

Individual Technique—Vocal Music courses provide instruction in and encourage the development of vocal techniques (including aural development) other than the ability to sing in groups. These courses may be conducted on either an individual or small group basis.

Music Theory

Music Theory courses provide students with an understanding of the fundamentals of music and include one or more of the following topics: composition, arrangement, analysis, aural development, and sight reading.

Music History/Appreciation

Music History/Appreciation courses survey different musical styles and periods with the intent of increasing students' enjoyment of musical styles and/or developing their artistic or technical judgment. Music History/Appreciation courses may also focus on developing an understanding of a particular style or period.

Music History

Similar in nature to Music History/Appreciation courses, Music History courses focus specifically on the history of music.

Music Appreciation

Similar in nature to Music History/Appreciation courses, Music Appreciation courses focus specifically on students' appreciation of music. They are designed to help students explore the world of music and to develop an understanding of the importance of music in their lives.

Composition/Songwriting

> Composition/Songwriting courses prepare students to express themselves thorough creating music. These courses may use conventional or nonconventional notation and may include harmonization in addition to melody writing. Along with musical instruments, students may also use computers for creating music.

Visual Arts

Art Appreciation

> Art Appreciation courses introduce students to the many forms of art and help them form an aesthetic framework through which they can judge and critique art of various ages and cultures. These courses also explore the place and significance of art in our society.

Art History

> Art History courses introduce students to significant works of art, artists, and artistic movements that have shaped the art world and have influenced or reflected periods of history. These courses often emphasize the evolution of art forms, techniques, symbols, and themes.

Creative Art—Comprehensive

> Creative Art—Comprehensive courses provide students with the knowledge and opportunity to explore an art form and to create individual works of art. These courses may also provide a discussion and exploration of career opportunities in the art world. Initial courses cover the language, materials, and processes of a particular art form and the design elements and principles supporting a work of art. As students advance and become more adept, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic styles. Although Creative Art courses focus on creation, they may also include the study of major artists, art movements, and styles.

Creative Art—Drawing/Painting

> Creative Art—Drawing/Painting courses cover the same topics as Creative Art—Comprehensive courses, but focus on drawing and painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

Creative Art—Drawing

> Creative Art—Drawing courses cover the same topics as Creative Art—Drawing/Painting, but focus on drawing. In keeping with this attention on two-dimensional work, students typically work with several media (such as pen-and-ink, pencil, chalk, and so on), but some courses may focus on only one medium.

Creative Art—Painting

> Creative Art—Painting courses cover the same topics as Creative Art—Drawing/Painting, but focus on painting. In keeping with this attention on two-dimensional work, students typically work with several media (such as watercolor, tempera, oils, acrylics, and so on), but some courses may focus on only one medium.

Creative Art—Sculpture

> Creative Art—Sculpture courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works. Students typically work with several media (such as clay, ceramics, wood, metals, textiles, and so on), but some courses may focus on only one medium.

Ceramics/Pottery

> Ceramics/Pottery courses cover the same topics as Creative Art—Comprehensive courses, but focus on creating three-dimensional works out of clay and ceramic material. Particular attention is

paid to the characteristics of the raw materials, their transformation under heat, and the various methods used to create and finish objects.

Printmaking

Printmaking courses introduce students to a variety of printmaking techniques using processes such as relief printing (monoprint, collograph block); intaglio (etching and engraving); and perigraphy (silkscreen films, stencils, block-out). These courses emphasize design elements and principles and introduce art criticism as applied to fine art prints. Lessons may also include the historical development of printmaking in Western and non-Western cultures.

Graphic Design

Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

Advertising Design

Advertising Design courses relate and apply creative expression and design principles to the field of advertising and commercial art. The courses offer practical experiences in generating original ideas, executing layouts, and preparing artwork for reproduction. Advertising Design courses may also provide a historical and contemporary view of art as students learn to critique work.

Textiles

Textiles courses teach the same lessons as Creative Art—Comprehensive courses, but do so with a focus on textiles. These courses may survey a wide range of crafts and art forms using textiles, or they may focus on only one type of art form; possibilities include weaving, macramé, quilting, batik, stitchery, and so on.

Crafts

Crafts courses teach the same lessons as Creative Art—Comprehensive courses, but do so with a focus on crafts. These courses may survey a wide range of crafts, or they may focus on only one type of craft; possibilities include calligraphy, quilting, silk-screening, cake-decorating, tole-painting, mask-making, knitting, crocheting, paper-making, and so on.

Jewelry

Jewelry courses apply art and design principles to the creation of jewelry. Typically, students explore using various media, such as ceramic, papier-mache, glass, plastic, copper-enameled, brass, and silver. Course topics include exposure to jewelry of diverse world cultures and the history of jewelry design. Some Jewelry courses may concentrate on metalwork processes such as brazing, soldering, casting, welding, riveting, and finishing as they relate to the creation of jewelry.

Photography

Photography courses expose students to the materials, processes, and artistic techniques of taking artistic photographs. Students learn about the operation of a camera, composition, lighting techniques, depth of field, filters, camera angles, and film development. The course may cover black-and-white photography, color photography, or both. As students advance, the instruction regarding the creative process becomes more refined, and students are encouraged to develop their own artistic style. These courses may also cover major photographers, art movements, and styles.

Film/Videotape

Film/Videotape courses expose students to the materials, processes, and artistic techniques involved in film, television, or videotape. Students learn about the operation of a camera, lighting

techniques, camera angles, depth of field, composition, storyboarding, sound capture, and editing techniques. Course topics may also include production values and various styles of filmmaking (documentary, storytelling, news magazines, animation, and so on). As students advance, the instruction becomes more refined, and students are encouraged to develop their own artistic style. Students may also study major filmmakers, cinematographers, and their films and learn about film, television, and video and their relationships to drama and theater.

Computer-Assisted Art

Computer-Assisted Art courses enable students to discover and explore how the computer can be used to create or to assist in producing various forms of artwork. Computer-Assisted Art courses provide the opportunity to become more adept in both the art form and in the use of the computer.

Integrated Arts

Integrated Fine Arts

Integrated Fine Arts courses explore self-expression across the fine arts: any subset or all of the visual arts, music, drama, theater, and literature may be included in the curriculum for these courses. Students both study and critique the works of others and participate in or produce art themselves. These courses often include comparative study of various art forms over time (i.e., the interrelationship of literature, music, and the performing arts of a particular time period and culture).

Foreign Language and Literature

Romance Languages

Spanish

Designed to introduce students to Spanish language and culture, Spanish I courses emphasize basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. Spanish culture is introduced through the art, literature, customs, and history of Spanish-speaking people.

Spanish Conversation and Culture

Spanish Conversation and Culture courses provide students with an introduction to the Spanish language and the culture(s) of Spanish-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

Spanish Literature

Spanish Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in Spanish.

French

Designed to introduce students to French language and culture, French I emphasizes basic grammar and syntax, simple vocabulary, and the spoken accent so that students can read, write, speak, and understand the language at a basic level within predictable areas of need, using customary courtesies and conventions. French culture is introduced through the art, literature, customs, and history of the French-speaking people.

French Conversation and Culture

French Conversation and Culture courses provide students with an introduction to the French language and the culture(s) of French-speaking people, placing greater emphasis on speaking and listening skills while de-emphasizing writing and reading the language.

French Literature

> French Literature courses place an emphasis on reading, understanding, and reacting in writing to literature written in French.

Other

Foreign Language and Literature

> Other Foreign Language and Literature courses will follow the same structure as for Spanish and French.

Physical, Health and Safety Education

Physical Education

Physical Education

> Physical Education courses provide students with knowledge, experience, and an opportunity to develop skills in more than one of the following sports or activities: team sports, individual/dual sports, recreational sports, and fitness/conditioning activities.

Team Sports (.25 per quarter)

> Team Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one team sport (such as volleyball, basketball, soccer, and so on).

Individual/Dual Sports (.25 per quarter)

> Individual/Dual Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one individual or dual sport (such as tennis, golf, badminton, jogging/running, racquetball, and so on).

Recreation Sports (.25 per quarter)

> Recreation Sports courses provide students with knowledge, experience, and an opportunity to develop skills in more than one recreational sport or outdoor pursuit (such as adventure activities, croquet, Frisbee, wall climbing, bocce ball, fishing, hiking, cycling, and so on).

Fitness/Conditioning Activities (.25 per quarter)

> Fitness/Conditioning Activities courses emphasize conditioning activities that help develop muscular strength, flexibility, and cardiovascular fitness.

Corps Movement (.25 per quarter)

> Corps Movement courses emphasize physical conditioning, fundamentals of movement, group precision, and public performance. The courses may be intended for members of various teams, including flag corps, rifle corps, cheerleading squads, and so on.

Adapted Physical Education (.25 per quarter)

> These courses provide physical education activities (sports, fitness, and conditioning) adapted for students with special needs.

Gymnastics (.25 per quarter)

> Gymnastics courses are designed to help students develop knowledge and skills in gymnastics, stunts, and tumbling while emphasizing safety. Floor gymnastics may be supplemented by the use of gymnastic equipment such as balance beam, uneven bars, parallel bars, rings, and so on. Gymnastic courses may include other components such as the history of gymnastics and conditioning.

Weight Training (.25 per quarter)

Weight Training courses help students develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning; they may include other components such as anatomy and conditioning.

Aquatic/Water Sports (.25 per quarter)

Aquatic/Water Sports courses help students develop skills useful or necessary in an aquatic environment. They may focus on swimming and competitive strokes, such as freestyle, breaststroke, butterfly, and so on or may involve team-oriented water sports, such as water polo and relay swimming. These courses may also include (or concentrate exclusively on) diving and/or lifesaving skills.

Self-defense (.25 per quarter)

Self-defense courses help students develop knowledge, skills, and abilities to defend themselves against attack by others, usually incorporating traditional self-defense methods. Students may also be taught techniques from martial arts, addressing the differences among those arts and their contribution to defense and sport.

Specific Sports Activities (.25 per quarter)

Courses in Specific Sports Activities help students develop knowledge, experience, and skills in a single sport or activity (such as basketball, volleyball, track and field, and equestrian events) other than those coded within this section. (Dance is included under the Fine and Performing Arts subject area.)

Lifetime Fitness Education

These courses emphasize acquiring knowledge and skills regarding lifetime physical fitness; content may include related topics such as nutrition, stress management, and consumer issues. Students may develop and implement a personal fitness plan.

Health Education

Health Education

Topics covered within Health Education courses may vary widely, but typically include personal health (nutrition, mental health and stress management, drug/alcohol abuse prevention, disease prevention, and first aid) and consumer health issues. The courses may also include brief studies of environmental health, personal development, and/or community resources.

Health and Fitness

Health and Fitness courses combine the topics of Health Education courses (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

Community Health

Community Health courses cover not only personal health topics (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on), but also more general health issues. These additional topics may include (among others) available community resources, fundamentals of the nation's health care system, contemporary world health issues, and career options within the health field.

Special Needs Health Education

Special Needs Health Education courses focus on the health requirements of individuals with special needs and emphasize meeting those needs within the home setting. These courses provide information regarding the elderly and individuals with disabilities, handicaps, and/or debilitating illnesses, along with strategies to prepare students for their possible roles as caretakers.

Safety and First Aid (.25 credit)

Safety and First Aid courses provide specialized instruction in first aid techniques, cardiopulmonary resuscitation (CPR), relief of obstructed airways, and general safety procedures and behaviors. These courses may include such topics as an overview of community agencies and hotlines providing emergency care and information and opportunities for first aid and CPR certification.

Health for Parenting Students

Designed for pregnant students and/or parents, topics within Health for Parenting Students courses cover a wide range of both health and parenting issues, typically including prenatal and postnatal care, health and well-being of young parents, child development, stress management, and parental/adult roles. The courses may also involve academic assistance, career exploration, financial management, and so on.

Health and Life Management

Health and Life Management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.

Substance Abuse Prevention (.25 credit)

Substance Abuse Prevention courses focus specifically on the health risks of drugs, alcohol and tobacco. These courses provide information on the negative consequences of these products and teach students coping strategies to resist the influences (such as peers and media images) that may entice them to use these substances. Students may also explore the community resources available to them.

Drivers' Education

Drivers' Education—Classroom Only

Drivers' Education—Classroom Only courses provide students with the knowledge to become safe drivers on America's roadways. Topics in these courses include legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs).

Drivers' Education—Classroom and Laboratory

Drivers' Education—Classroom and Laboratory courses provide students with the knowledge and experience to become safe drivers on America's roadways. Topics in these courses cover legal obligations and responsibility, rules of the road and traffic procedures, safe driving strategies and practices, and the physical and mental factors affecting the driver's capability (including alcohol and other drugs). Experience in driving a vehicle is an essential component of these courses.

Computer and Information Sciences

Computer Literacy

Introduction to Computers

Introduction to Computer courses introduce students to computers and peripheral devices, the functions and uses of computers, the language used in the computer industry, possible applications of computers, and occupations related to computer hardware and software. These courses typically explore legal and ethical issues associated with computer use, as well as how computers influence modern society. Students may also be required to perform some computer operations.

Computing Systems

Computing Systems courses offer a broad exploration of the use of computers in a variety of fields. These courses have a considerable range of content, but typically include the introduction of robotics and control systems, computer-assisted design, computer-aided manufacturing systems, and other computer technologies as they relate to industry applications.

Computer and Information Technology

Computer and Information Technology courses teach students to operate and use computer and information technology, emphasizing their role as tools to communicate more effectively, conduct research more efficiently, and increase productivity. Course content includes the legal and ethical issues involved with computer technology and use.

Computer Applications

In Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages. These courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover the use of electronic mail and desktop publishing.

Business Computer Applications

In Business Computer Applications courses, students acquire knowledge of and experience in the proper and efficient use of previously written software packages, particularly those used in the business world. Generally, these courses explore a wide range of applications, including (but not limited to) word-processing, spreadsheet, graphics, and database programs, and they may also cover topics such as electronic mail, desktop publishing, and telecommunications.

Telecommunications

Telecommunications courses address the growth in global communications and the emerging equipment and systems needed to successfully communicate in a global environment. These courses cover such topics as data communication protocol and systems, government regulations of the communications industry, and the use of cost-effective and productive tools to transmit messages and data. In these courses, students may learn about such communication systems as e-mail, internet or e-commerce, LAN, WAN, voice transmission, cell phone technology, and traditional teleconferencing.

Management Information Systems

Information Management

Information Management courses provide students with the knowledge and skills to develop and implement a plan for an information system that meets the needs of business. Students develop an understanding of information system theory, skills in administering and managing information systems, and the ability to analyze and design information systems.

Database Management and Data Warehousing

Database Management and Data Warehousing courses provide students with the skills necessary to design databases to meet user needs. Courses typically address how to enter, retrieve, and manipulate data into useful information. More advanced topics may cover implementing interactive applications for common transactions and the utility of mining data.

Database Applications

Database Application courses provide students with an understanding of database development, modeling, design, and normalization. These courses typically cover such topics as SELECT statements, data definition, manipulation, control languages, records, and tables. In these courses, students may use Oracle WebDB, SQL, PL/SQL, SPSS, and SAS and may prepare for certification.

Data Systems/Processing

Data Systems/Processing courses introduce students to the uses and operation of computer hardware and software and to the programming languages used in business applications. Students typically use BASIC, COBOL, and/or RPL languages as they write flowcharts or computer programs and may also learn data-processing skills.

Computer Science/Programming

Business Programming

Business Programming courses provide students with experience in using previously written software packages as well as designing and writing programs of their own. The word-processing, spreadsheet, graphics, and database exercises in these courses contain a business industry focus, and the original programs are written in languages typical of this industry (Visual Basic (VB), C++, Java, BASIC, COBOL, and/or RPL).

Computer Programming

Computer Programming courses provide students with the knowledge and skills necessary to construct computer programs in one or more languages. Computer coding and program structure are often introduced with the BASIC language, but other computer languages, such as Visual Basic (VB), Java, Pascal, C++, and COBOL, may be used instead. Initially, students learn to structure, create, document, and debug computer programs, and as they progress, more emphasis is placed on design, style, clarity, and efficiency. Students may apply the skills they learn to relevant applications such as modeling, data management, graphics, and text-processing.

Visual Basic Programming

Visual Basic (VB) Programming courses provide an opportunity for students to gain expertise in computer programs using the Visual Basic (VB) language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs and how to use problem-solving techniques. These courses cover such topics as the use of text boxes, scroll bars, menus, buttons, and Windows applications. More advanced topics may include mathematical and business functions and graphics.

C++ Programming

C++ Programming courses provide an opportunity for students to gain expertise in computer programs using the C++ language. As with more general computer programming courses, the emphasis is on how to write logically structured programs, include appropriate documentation, and use problem-solving techniques. More advanced topics may include multi-dimensional arrays, functions, and records.

Java Programming

Java Programming courses provide students with the opportunity to gain expertise in computer programs using the Java language. As with more general computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. Topics covered in the course include syntax, I/O classes, string manipulation, and recursion.

Computer Programming—Other Language

Computer Programming—Other Language courses provide students with the opportunity to gain expertise in computer programs using languages other than those specified (such as Pascal, FORTRAN, or emerging languages). As with other computer programming courses, the emphasis is on how to structure and document computer programs, using problem-solving techniques. As students advance, they learn to capitalize on the features and strengths of the language being used.

Media Technology

Web Page Design

Web Page Design courses teach students how to design web sites by introducing them to and refining their knowledge of site planning, page layout, graphic design, and the use of markup languages—such as Extensible Hypertext Markup, JavaScript, Dynamic HTML, and Document Object Model—to develop and maintain a web page. These courses may also cover security and privacy issues, copyright infringement, trademarks, and other legal issues relating to the use of the Internet. Advanced topics may include the use of forms and scripts for database access, transfer methods, and networking fundamentals.

Computer Graphics

Computer Graphics courses provide students with the opportunity to explore the capability of the computer to produce visual imagery and to apply graphic techniques to various fields, such as advertising, TV/video, and architecture. Typical course topics include modeling, simulation, animation, and image retouching.

Interactive Media

Interactive Media courses provide students with the knowledge and skills to create, design, and produce interactive media products and services. The courses may emphasize the development of digitally generated and/or computer-enhanced media. Course topics may include 3D animation, graphic media, web development, and virtual reality. Upon completion of these courses, students may be prepared for industry certification.

Information Support and Services

Computer Technology

Computer Technology courses introduce students to the features, functions, and design of computer hardware and provide instruction in the maintenance and repair of computer components and peripheral devices.

Computer Maintenance

Computer Maintenance courses prepare students to apply basic electronic theory and principles in diagnosing and repairing personal computers and input/output devices. Topics may include operating, installing, maintaining, and repairing computers, network systems, digital control instruments, programmable controllers, and related robotics.

Information Support and Services

Information Support and Services courses prepare students to assist users of personal computers by diagnosing their problems in using application software packages and maintaining security requirements.

IT Essentials: PC Hardware and Software

IT Essentials: PC Hardware and Software courses provide students with in-depth exposure to computer hardware and operating systems. Course topics include the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Students learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, these courses introduce students to networking and often prepare them for industry certification.

CISCO—The Panduit Network Infrastructure Essentials (PNIE)

CISCO—PNIE courses provide students with the knowledge to create innovative network infrastructure solutions. These courses offer students basic cable installer information and help them acquire the skills to build and use the physical layer of network infrastructure and develop a deeper understanding of networking devices.

Communication and Audio/Visual Technology

Communication

Introduction to Communication

Introduction to Communication courses enable students to understand and critically evaluate the role of media in society. Course content typically includes investigation of visual images, printed material, and audio segments as tools of information, entertainment, and propaganda; improvement of presentation and evaluative skills in relation to mass media; recognition of various techniques for delivery of a particular message; and, in some cases, creation of a media product. The course may concentrate on a particular medium.

Communication Technology

Communication Technology courses enable students to effectively communicate ideas and information through experiences dealing with drafting, design, electronic communication, graphic arts, printing process, photography, telecommunications, and computers. Additional topics covered in the course include information storage and retrieval. Drafting equipment may be used to make scale drawings, including multi-view drawing, photographs, and poster mock-ups.

Audio and Video Technology and Film

Audio/Visual Production

Audio/Visual Production courses provide students with the knowledge and skills necessary for television, video, film, and/or radio production. Writing scripts, camera operation, use of graphics and other visuals, lighting, audio techniques, editing, production principles, and career opportunities are typical topics covered within production courses. Students are usually required to produce their own program or segment. Additional topics such as broadcast industry regulations, radio/TV operation, power of the medium, photography, transmission technology, and so on may be included.

Photo Imaging

Photo Imaging courses provide students with the opportunity to effectively communicate ideas and information via digital, film, still and video photography. Topics covered typically include composition, layout, lighting and supplies. More advanced courses may include instruction in specialized camera and equipment maintenance, application to commercial and industrial need and photography business operations.

Video

Video courses enable students to explore video communications, incorporating both the technical and artistic aspects of video media. Topics covered in the course include the use of video equipment and techniques, and students typically create a video presentation. Advanced course topics may include creating various forms of film media including silent film; sport and music video; and self portrait video.

Journalism and Broadcasting

Journalism

Journalism courses (typically associated with the production of a school newspaper, yearbook, or literary magazine) emphasize writing style and technique as well as production values and organization. Journalism courses introduce students to the concepts of newsworthiness and press responsibility; develop students' skills in writing and editing stories, headlines, and captions; and teach students the principles of production design, layout, and printing. Photography and photojournalism skills may be included.

Photojournalism

> Photojournalism courses expose students to the manner in which photography is used to convey information and experiences. Typically coordinated with production of the school newspaper, yearbook, or other media product, photojournalism courses provide students with the opportunity to improve their photo composition and film development skills, and to apply their art to journalistic endeavors.

Broadcasting Technology

> Broadcasting Technology courses provide students with the knowledge and skills to produce television broadcast programs. Typically, students prepare and produce short programs, learning the technical aspects of the operation and how to evaluate programming and assess audience reaction and impact.

Publication Production

> Publication Production courses provide students with the knowledge and skills necessary to produce the school newspaper, yearbook, literary magazine, or other printed publication. Students may gain experience in several components (writing, editing, layout, production, and so on) or may focus on a single aspect while producing the publication.

Printing Technology and Production

Digital Media Technology

> These courses are designed to give students the skills necessary to support and enhance their learning about digital medial technology. Topics covered in the course may include Internet research, copyright laws, web publishing, use of digital imagery, electronic forums, newsgroups, mailing lists, presentation tools, and project planning.

Desktop Publishing

> Desktop Publishing courses integrate the knowledge and skills learning in word processing with the concepts, procedures and application of desktop publishing. Students learn to format, create and proofread brochures, programs, newsletters, web pages, presentations and manuscripts.

Digital Media Design and Production

> Digital Media Design and Production courses teach students the fundamentals of graphic design and production and provide students with the opportunity to apply these principles to printed media, digital presentation media, and interactive media.

Commercial Graphic Design

> Commercial Graphic Design courses teach students to use artistic techniques to effectively communicate ideas and information to business and customer audiences via illustration and other forms of digital or printed media. Topics covered may include concept design, layout, paste-up and techniques such as engraving, etching, silkscreen, lithography, offset, drawing and cartooning, painting, collage and computer graphics.

Print Press Operations

> These courses expose students to the necessary skills for operating a print press. Topics covered in this course include how to prepare, operate and maintain printing processes.

Business and Marketing

Administration

Business/Office Career Exploration

Business/Office Career Exploration courses expose students to the occupational opportunities available in the accounting, administration, data processing, management, and secretarial fields. Emphasis is placed on responsibilities, qualifications, work environment, and career paths. These courses may also include consumer education topics, keyboard exposure, and/or hands-on experience within the various occupational areas.

Office Procedures—Comprehensive

Office Procedures—Comprehensive courses provide students with numerous opportunities to explore and understand the responsibilities and duties common to most office personnel. These comprehensive courses cover such topics as communication skills, reception and transmission of information via data processing equipment, filing and record management, mail handling, scheduling meetings and conferences, creating itineraries, and word processing.

Office and Administrative Technologies

Office and Administrative Technologies courses provide students with instruction and experience in developing technical, problem-solving, and decision-making skills essential for office and/or administrative occupations. Emphasis is placed on integrating and applying knowledge and skills to realistic office and administrative situations utilizing current and relevant technology.

Office Services

Office Services courses introduce students to and help them refine clerical and receptionist skills. Course content typically covers filing, telephone, and keyboarding skills; reprographic machinery and procedures; communications skills; and so on.

Keyboarding

Keyboarding courses provide students with an introduction to the keyboard (letters, numbers, and symbols), basic machine operation, and proper keystroke technique. As students progress, they improve their speed and accuracy and produce increasingly complex documents. Such courses help students develop keyboard proficiency, document production skills, and problem-solving skills.

Word Processing

Word Processing courses introduce students to automated document production using one or more software packages. These courses may introduce keyboarding techniques or may require prior experience; in either case, speed and accuracy are emphasized. A parallel focus is placed on the use of software commands and functions to create, edit, format, and manipulate documents, capitalizing on the power offered by word processing software programs. These courses may also cover file and disk management and other computer-related skills.

Recordkeeping

Recordkeeping courses help students to develop knowledge and skills related to the principles and procedures involved in recording personal financial transactions as well as transactions typically undertaken by small businesses. Partial emphasis may be placed on personal banking, budgeting, and income tax calculations; additional emphasis is usually placed on cashier and clerk procedures, inventory control for small businesses, database management, merchandising, and payroll.

Business Communications

Business Communications courses help students to develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all

phases of communication: speaking, listening, thinking, responding, reading, writing, communicating non-verbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and real-world application.

Management

Introductory Business

Introductory Business courses survey an array of topics and concepts related to the field of business. These courses introduce business concepts such as banking and finance, the role of government in business, consumerism, credit, investment, and management. They usually provide a brief overview of the American economic system and corporate organization. Introductory Business courses may also expose students to the varied opportunities in secretarial, accounting, management, and related fields.

Business Management

Business Management courses acquaint students with management opportunities and effective human relations. These courses provide students with the skills to perform planning, staffing, financing, and controlling functions within a business. In addition, they usually provide a macro-level study of the business world, including business structure and finance, and the interconnections among industry, government, and the global economy. The course may also emphasize problem-based, real-world applications of business concepts and use accounting concepts to formulate, analyze, and evaluate business decisions.

Entrepreneurship

Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication. Several topics surveyed in Business Management courses may also be included.

Business Law

Business Law courses emphasize legal concepts that are relevant to business and business organizations. Topics examined in these courses typically include contracts, buying/renting property, installment buying, insurance, buyer/seller relationships, negotiable instruments, employment, taxes, insurance, commercial papers, legal organizational structures, and consumer liabilities.

Business Principles and Management

Business Principles and Management courses are designed to provide students with an understanding of the American business system, its organizations, and its management. These courses examine the various leadership and management styles of a variety of successful business organizations, large or small.

Human Resources and Labor Relations

Human Resources and Labor Relations courses analyze the functions of conflict resolution and collective bargaining. Typically, students examine the history of the labor movement within the United States, the relationship between management and labor, and how organized labor currently operates.

Human Resources Management

Human Resources Management courses provide students with an understanding of the effective use of interpersonal skills in achieving the goals of an organization.

Finance

Banking and Finance

Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.

Accounting

Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

Business Economics

Business Economics courses integrate economic principles (such as free market economy, consumerism, and the role of American government within the economic system) with entrepreneurship/business concepts (such as marketing principles, business law, and risk).

Risk Management and Insurance

Risk Management and Insurance courses analyze risk management techniques from the viewpoints of those employed in the industry as well as of business owners seeking to meet risk management needs. Insurance products are evaluated in relation to cost and effectiveness.

Investing

Investing courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into Investing courses.

Sales

Cashier/Checker Operations

Cashier/Checker Operations courses provide students with the knowledge and skills to operate a cash register and to handle numerous transactions. Topics typically include cash register procedures; handling cash, credit, checks, food stamps, and other forms of legal tender; human relations; stocking and marking merchandise; and theft prevention. Job search and employability skills are often an integral part of the course.

Principles of Selling

Principles of Selling courses provide students with the knowledge and opportunity to develop in-depth sales competencies. Course content typically includes types of selling, steps in a sale, sales strategies, and interpersonal skills and techniques.

Manufacturing

Manufacturing Technology

Exploration of Manufacturing Occupations

Exploration of Manufacturing Occupations courses introduce and expose students to the career opportunities pertaining to the processing and production of goods. Course topics vary and may

include (but are not limited to) systems pertinent to the manufacturing process, properties of various raw materials, and the methods used to transform materials into consumer products. Course activities depend upon the careers being explored; course topics may include entrepreneurship, labor laws, and customer service.

Manufacturing—Comprehensive

Manufacturing—Comprehensive courses introduce students to the various methods used to process and transform materials. Processing techniques covered usually include casting, forming, separating, assembling, and finishing. The courses may also include an overview of management techniques in planning, organizing, and controlling various segments of the manufacturing process, including design, engineering, production, and marketing.

Industrial Safety/First Aid

Industrial Safety/First Aid courses provide students with instruction in safe operating procedures related to various trades, as well as more general training in emergency first aid and CPR. Course topics may include the importance of standard operation procedures, agencies and regulations related to occupational safety and hazard prevention, and the dangers of particular materials.

Processing/Production

Materials and Processes

Materials and Processes courses expose students to the tools, machines, and processes that may be encountered in manufacturing-related occupations. In particular, these courses stress the analysis, testing, and processing of metals, plastics, woods, ceramics, and composite materials.

Metal and Wood Processing/Production

Metal and Wood Processing/Production courses include studying the properties of metals, woods, and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

Wood Processing/Production

Wood Processing/Production courses include studying the properties of woods and composites made from woods and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

Metal Processing/Production

Metal Processing/Production courses include studying the properties of metals and metal alloys and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

Plastics Processing/Production

Plastics Processing/Production courses include studying the properties of plastics and composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

Ceramic Processing/Production

Ceramic Processing/Production courses include studying the properties of ceramics and heat-resistant composites and using these materials to construct usable products. These courses enable students to experience the process of translating an idea into a finished product, with instruction in planning, designing, selecting materials, and using tools and machines.

Production Systems

Production Systems

Production Systems courses provide students with knowledge and skills related to manufacturing technologies from conception through production. Although courses vary, students typically analyze markets, design and develop prototypes, plan a marketing or sales strategy, manage a production plan, and manufacture useful products. These courses may also explore the evolution and impact of technology on society's social, cultural, and economic systems and institutions.

Electro-Mechanical Systems

Electro-Mechanical Systems courses provide students with instruction and experience in components and equipment that use electricity and the power of physical forces. Students gain an understanding of the principles of electricity and mechanics and their application to gears, cams, levers, circuits, and other devices used in the manufacturing process or within manufactured goods.

Product Development

Product Development courses provide students with the opportunity to focus on one or more areas of industrial technology, creatively pursuing new knowledge or solving a technological problem, by designing and building prototypes and working models. Students learn and apply appropriate information in order to complete a project.

Metalwork

Metalwork Occupations

Metalwork Occupations courses provide students with theoretical principles and laboratory experiences related to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, and structures in which materials are cast, formed, treated, cut, fused, or otherwise processed in some fashion.

Metalworking

Metalworking courses introduce students to the qualities and applications of various metals and the tools used to manipulate and form metal into products. Through one or more projects involving metals, students develop planning, layout, and measurement skills; gain experience in cutting, bending, forging, casting, and/or welding metal; complete projects according to blueprints or other specifications; and may also learn to polish and finish metals. Correct use of metalworking tools and equipment is stressed.

Welding

Welding courses enable students to gain knowledge of the properties, uses, and applications of various metals, skills in various processes used to join and cut metals (such as oxyacetylene, shielded metal, metal inert gas, and tungsten arc processes), and experience in identifying, selecting, and rating appropriate techniques. Welding courses often include instruction in interpreting blueprints or other types of specifications.

Particular Topics in Welding

In these courses students gain knowledge and skills in particular aspects of welding. Examples include individual courses in each of the following types of welding: gas metal, gas tungsten, and shielded metal and flux core arc welding.

Repair

Appliance Repair

Appliance Repair courses provide students with the knowledge and experience to repair, install, service, and inspect appliances such as stoves, refrigerators, washers, dryers, air conditioners,

water heaters, and so on. Students gain an understanding of the mechanics and working systems of these appliances, the skills to read blueprints and specifications, and proficiency in using related tools and products.

Equipment Maintenance and Repair

Equipment Maintenance and Repair courses prepare students to adjust, maintain, replace, and repair parts of machinery and to repair tools, equipment, and machines. The courses may have a general emphasis or may focus on a specific type of machinery or equipment related to a particular industry. Depending upon the intent, course topics may include electric, hydraulic, or mechanic systems; control devices, valves, and gates; or supplemental equipment such as fans, hoses, and pipes.

Hospitality and Tourism

Restaurant, Food and Beverage Services

Exploration of Restaurant, Food, and Beverage Services

Exploration of Restaurant, Food, and Beverage Services courses provide students with an overview of the restaurant, food, and beverage service industry. Topics covered include industry terminology, the history of restaurant, food, and beverage services, introduction to marketing, and the various careers available in the industry.

Restaurant, Food, and Beverage Services—Comprehensive

Restaurant, Food, and Beverage Services—Comprehensive courses provide students with knowledge and skills related to commercial and institutional food service establishments. Course topics range widely, but usually include sanitation and safety procedures, nutrition and dietary guidelines, food preparation (and quantity food production), and meal planning and presentation. Restaurant, Food, and Beverage Service courses may include both "back-of-the-house" and "front-of-the-house" experiences, and may therefore also cover reservation systems, customer service, and restaurant/business management.

Food Service

Food Service courses provide instruction regarding nutrition, principles of healthy eating, and the preparation of food. Among the topics covered are large-scale meal preparation, preserving nutrients throughout the food preparation process, use and care of commercial cooking equipment, food storage, advances in food technology, sanitation, management, and the careers available in the food service industry.

Nutrition and Food Preparation

Nutrition and Food Preparation courses provide students with knowledge and skills about food preparation and/or production, with a strong emphasis on nutrition, balanced diets, and satisfying special dietary needs. Topics typically include assessing nutrient content, the science of food and nutrition, physiology and utilization of nutrients. Course content may also cover additives, contaminants, food-borne illnesses, and food technology.

Restaurant Management and Operations

Restaurant Management and Operations courses provide students with knowledge and skills related to commercial and institutional food service establishments, with an emphasis on management. Course topics therefore include guest service and relationships, planning, resource management, and other topics related to managing and operating restaurants.

Culinary Art Specialty

Culinary Art Specialty courses provide instruction in a particular type of cooking or culinary style. Examples of such specialty fields include baking, creating and decorating wedding cakes,

Middle Eastern cuisine, and so on. These courses emphasize skills specific to the type of culinary art being studied.

Particular Topics in Restaurant, Food, and Beverage Services

These courses examine specific topics related to Restaurant, Food, and Beverage Services, such as catering, rather than provide a general study of the industry or of specific topics already described.

Lodging

Exploration of Lodging Careers

Exploration of Lodging Careers courses provide an overview of the lodging industry. Topics covered include lodging terminology, the history of lodging, introduction to marketing, and the various careers available in the lodging industry.

Lodging—Comprehensive

Lodging—Comprehensive courses introduce students to the lodging industry and refine their related knowledge and skills. Topics covered typically include property management, guest psychology and relationships, lodging operations, food and beverage services, and other topics related to support services within the lodging industry.

Institutional Maintenance

Institutional Maintenance courses present the knowledge and skills required for service work within institutions. Topics covered typically include housekeeping and laundry services, care and cleaning of facilities, and safety and sanitation procedures, in addition to career opportunities, business responsibilities, and other types of ongoing maintenance.

Particular Topics in Lodging

These courses examine specific topics in lodging such as convention planning or hotel management rather than provide a general study of the industry or of specific topics already described.

Architecture and Construction

Construction-General

Construction Careers Exploration

Construction Career Exploration courses expose students to the opportunities available in construction-related trades, such as carpentry, masonry, air conditioning/refrigeration, plumbing, and so on. Students learn about the processes involved in construction projects and may engage in a variety of small projects. These courses emphasize responsibilities, qualifications, work environment, rewards, and career paths within construction-related fields.

Construction—Comprehensive

Construction—Comprehensive courses provide students with basic knowledge and skills required for construction of commercial, residential, and institutional structures. These courses provide experiences and information (typically including career opportunities and training requirements) regarding construction-related occupations such as carpentry, cabinetmaking, bricklaying, electrical trades, plumbing, concrete masonry, and so on. Students engage in activities such as reading blueprints, preparing building sites, starting foundations, erecting structures, installing utilities, finishing surfaces, and providing maintenance.

Carpentry

Carpentry courses provide information related to the building of wooden structures, enabling students to gain an understanding of wood grades and construction methods and to learn skills

such as laying sills and joists; erecting sills and rafters; applying sheathing, siding, and shingles; setting door jambs; and hanging doors. Carpentry courses may teach skills for rough construction, finish work, or both. Students learn to read blueprints, draft, use tools and machines properly and safely, erect buildings from construction lumber, perform finish work inside of buildings, and do limited cabinet work. Carpentry courses may also include career exploration, good work habits, and employability skills.

Framing Carpentry

Framing Carpentry courses provide students with much of the same knowledge as general carpentry courses (knowledge of various types and grades of woods, proper and safe use of hand and power tools, and site selection and preparation), but place a special emphasis on construction methods applicable to floor, wall, roof, and/or stair framing. Course content may also include insulation installation and painting.

Particular Topics in Carpentry

These courses cover specific aspects of building construction or carpentry. All coursework focuses upon a particular skill or set of skills related to one subtopic, such as floor framing, wall and partition framing, interior finishing, or exterior finishing.

Woodworking

Woodworking courses introduce students to the various kinds of woods used in industry and offer experience in using selected woodworking tools. Students design and construct one or more projects and may prepare a bill of materials. Correct and safe use of tools and equipment is emphasized. As students advance, they focus on learning the terminology necessary to use power tools successfully, developing skills to safely use these tools in the workshop and becoming familiar with various kinds of wood-finishing materials. Advanced students typically design a project, prepare bills of materials, construct, and finish proposed projects.

Cabinetmaking

Cabinetmaking courses provide students with experience in constructing cases, cabinets, counters, and other interior woodwork. Students learn to distinguish between various types of furniture construction and their appropriate applications, and how to use various woodworking machines and power tools for cutting and shaping wood. Cabinetmaking courses cover the different methods of joining pieces of wood, how to use mechanical fasteners, and how to attach hardware. Initial topics may resemble those taught in Woodworking courses; more advanced topics may include how to install plastic laminates on surfaces and how to apply spray finishes.

Masonry

Masonry courses enable students to learn to construct interior and exterior walls, columns, doorways, window openings, fireplaces, chimneys, and foundations from brick and concrete block. Along with other activities, students may mix and spread cement and mortar, read blueprints and plans, and estimate materials needed for a project. Other topics may also include how to layout buildings on footings and how to establish grades using a surveying transit.

Building Maintenance

Building Maintenance courses train students to maintain commercial, industrial, and residential buildings and homes. Instruction is provided in the basic maintenance and repair of air conditioning, heating, plumbing, electrical, and other mechanical systems. Topics covered may include identifying and using hand and power tools safely; installing and repairing floor coverings, walls, and ceilings; installing and repairing doors, windows, screens, and cabinets; applying finishes to prepared surfaces; and repairing roofs, masonry, plumbing, and electrical systems.

Home Maintenance

Home Maintenance courses provide students with knowledge and skills related to devices and systems found in the home. Course content may include electrical wiring, plumbing, window and door repair and installation, wall and floor repair and finishing, furniture repair and finishing, and small appliance repair.

Wall Finishings

Wall Finishings courses prepare students to finish exterior or interior surfaces by applying protective coating materials such as paint, lacquer, wallpaper, plaster, or stucco. Course topics may include instruction in making, mixing, and matching paint colors; applying coating with various types of equipment; applying wallpaper; lathing, preparing surfaces, smoothing, and finishing.

Upholstering

Upholstering courses prepare students in all aspects of upholstering furniture. Topics covered may include installing, repairing, arranging, and securing the springs, filler, padding and cover materials of chairs, couches and mattresses; cutting, sewing and trimming; cushion filling, tufting, and buttoning; and wood refinishing.

Air Conditioning, Heating, and Plumbing

Air Conditioning

Air Conditioning courses offer students specialized training related to the design, installation, and repair of air conditioning systems for residential and commercial use. These courses may emphasize the theory and design of electrical, electronic, mechanical, and pneumatic control systems used in air conditioning systems; they might also (or instead) focus on procedures used in troubleshooting, servicing, and installing components of air conditioning systems.

Refrigeration

Refrigeration courses provide students with exposure to and training in the theories, equipment, and skills needed to design, install, and repair commercial and residential refrigeration systems. Course topics typically include the theory of thermodynamics, measurement of pressures and temperatures, components and common accessories of refrigeration systems, and repair and safety procedures.

Heating

Heating courses offer students training specific to the design, installation, and repair of heating systems for residential use. Topics typically include electric, gas, and/or steam systems; ventilation procedures; safety practices; and installation and trouble-shooting techniques.

Air Conditioning/Refrigeration

Air Conditioning/Refrigeration courses enable students to develop the combined skills and knowledge to install, maintain, adjust, and repair both air conditioning and refrigeration systems.

Air Conditioning, Heating, and Refrigeration

In Air Conditioning, Heating, and Refrigeration courses, students learn the basic principles of these systems, along with how to identify and safely use tools/equipment used in the trade.

Heating, Ventilation, and Air Conditioning

These courses synthesize basic and advanced principles in heating, ventilation, and air conditioning and include topics such as air filtration methods, humidity control, and the installation and maintenance of heat pumps, furnaces, and air conditioners. Students also learn about climate control systems; electrical wiring; systems design; sizing, fabricating, and installing ductwork; installing and maintaining climate control systems; and safety.

Plumbing

> Plumbing courses provide students with instruction in installing waste and vent systems, water and gas pipes, trim, and fixtures. Skills taught include cutting and joining various types of pipe (for instance, steel, plastic) using various methods (cement, seat method, and so on).

Plumbing and Heating

> Plumbing and Heating courses address the installation, assembly, maintenance, and repair of piping, plumbing, heating equipment, and water and drainage systems. Topics covered include the computation of heat losses and BTU requirements and blueprint reading. Students gain experience with electric, gas, and oil furnaces; vacuum pumps; air compressors; and mechanical and pneumatic testing equipment.

Electricity and Electronics

Exploration of Electricity/Electronics

> Exploration of Electricity/Electronics courses offer instruction in the theory of electricity and in the terminology, skills, and safety procedures common to careers involving electricity and electronics. Topics include (but are not limited to) Ohm's law, electrical equipment, wire systems, and so on; career exploration is often (but not always) an integral part of these courses.

Electricity—Comprehensive

> Electricity—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electrical field. These courses typically include AC and DC circuitry, safety, and the National Electrical Code and may cover such skills as those involved in building circuits; wiring residential, commercial, and/or industrial buildings; installing lighting, power circuits, and cables; and estimating job costs. As students progress, their projects become more complex and expansive. In these courses, safety is stressed, and a career exploration component may be offered.

Residential Wiring

> Covering many of the same topics as Electricity—Comprehensive courses, Residential Wiring courses apply the knowledge and skills that students acquire to the electrical systems found in family dwellings. Because these courses emphasize residential electricity, topics may also include cable installation, telephone systems, and the installation of lighting fixtures, outlets, and so on. Maintenance and repair skills are often included as course topics.

Industrial Electricity

> Covering many of the same topics as Electricity—Comprehensive courses, Industrial Electricity courses apply the knowledge and skills that students acquire to the electrical systems used in industry. Because of this emphasis, these courses may also cover the installation of transformers and control devices, emergency generator systems, and other industrial applications.

Electronics—Comprehensive

> Electronics—Comprehensive courses provide a survey of the theory, terminology, equipment, and practical experience in the skills needed for careers in the electronic field as well as typically cover the theory of electricity. Course topics may include AC, DC, analog, and integrated circuitry and solid state and digital devices, amplifiers, and semiconductors. Skills covered may involve the repair, maintenance, and building of electronic equipment such as radios, television sets, and industrial equipment.

Particular Topics in Electronics

> Individual courses in this category offer specialized training in topics related to electronics such as diodes, transistors, digital techniques, solid-state devices, analog circuits, and microprocessors.

Electricity/Electronics—General

Electricity/Electronics—General courses teach fundamental concepts of electricity and electronics, including safety procedures, and may introduce students to the available occupations in electrical and electronic industries. Topics covered typically include components of circuits; reading schematics and diagrams; electricity and electronics as sources of energy; signal transmission; and using equipment common to these occupations, such as ammeters, voltmeters, capacitor checkers, transistor testers, signal generators, and ohmmeters.

Particular Topics in Electricity/Electronics

These courses provide instruction in the theory and skills needed in fields involving electricity and electronics and related fields that focus on electrical wiring or electronic signals.

Analog and Digital Circuits

In these courses, analog and digital circuits and systems are compared. Topics covered include binary and continuously variable currents and signals (typically in the context of voltage), waveforms, signal loss and distortion, modulation, and signal processing. These courses may also introduce other media, such as sound waves and liquids.

Agriculture, Food and Natural Resources

Comprehensive

Introduction to Agriculture and Natural Resources

Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.

Agriculture—Comprehensive

Agriculture—Comprehensive courses cover a wide range of agricultural topics, including plant and animal science, production, and processing; agricultural mechanics, including tool and machine operation and repair; construction and repair of farm structures; business operations and management; and the careers available in the agricultural industry. They may also include topics such as chemical and soil science, ecology, agricultural marketing, and veterinary science.

Agriculture and Natural Resources—Comprehensive

Agriculture and Natural Resources—Comprehensive courses cover a wide range of topics concerning agriculture and natural resources, including plant and animal science, production, and processing; environmental science and conservation; ecology; agricultural mechanics; agricultural construction; business operations and management; and the careers available in the agricultural/natural resources industry. They may also include topics such as chemical and soil science, forestry, agricultural marketing, and veterinary science.

Plant Systems

Plant Production/Science

Plant Production/Science courses provide knowledge about the propagation of plants for food and fiber. These courses may cover such topics as soil science, irrigation, pest and weed control, food and fiber processing, and farm operations. They may also cover the knowledge and skills needed to produce all types of crops or may emphasize a particular area of the agricultural industry.

General Horticulture

General Horticulture courses expose students to the art and science of growing plants, shrubs, trees, flowers, fruits, and vegetables. In doing so, they cover a wide variety of topics, including greenhouse and nursery operations, soils and media mixtures, fruit and vegetable production, turf/golf course management, interior and exterior plantscaping, irrigation systems, weed and pest control, and floral design.

Ornamental Horticulture

Similar to General Horticulture, Ornamental Horticulture courses provide information regarding the care and propagation of plants, flowers, trees, and shrubs, but place a special emphasis on those used for decorative and aesthetic purposes. Because of this particular emphasis, Ornamental Horticulture courses usually concentrate on nurseries and greenhouses and on the floristry industry.

Turf and Landscape Management

Turf and Landscape Management courses provide instruction that incorporates plant science, soil and media mixtures, plant identification and optimal environments, and landscape design. These courses emphasize applying such knowledge and skill to the design, establishment, and maintenance of lawns, parks, open space, and similar environments.

Soil Science

Soil Science courses involve the study of soil properties, including soil chemistry, biology, fertility, mineralogy, and hydrology. Topics covered may also include soil conservation, irrigation, and management.

Particular Topics in Plant Systems

These courses examine specific topics related to Plant Systems, such as floral design, hydroponics, or landscaping, rather than provide a general study of plant systems or horticulture.

Animal Systems

Animal Production/Science

Animal Production/Science courses impart information about the care and management of domestic and farm animals. These courses may cover animal nutrition, health, behavior, selection, reproduction, anatomy and physiology, facilities, product processing, and marketing. Students may study a particular species (swine, cattle, horses, fowl, sheep, and so on), or they may learn how to care for and maintain livestock as a more inclusive study.

Small Animal Care

Small Animal Care courses focus on the care and management of small animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Course topics may include kennel operations and sales.

Large Animal Care

Large Animal Care courses focus on the care and management of large animals. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study. Course topics may include product processing and marketing.

Equine Science

Equine Science courses focus on the care and management of horses. Animal nutrition, health, behavior, reproduction and breeding, anatomy and physiology, facilities, handling and training, and grooming are typical areas of study.

Veterinary Science

Veterinary Science courses impart information about the causes, diagnosis, and treatment of diseases and injuries of animals, typically emphasizing domestic and farm animals. Course topics focus on anatomy and physiology, nutrition, behavior, and reproduction, but may also include other areas of study as appropriate.

Particular Topics in Animal Systems

These courses examine specific topics related to animal care and management, production, or processing, such as equine training or animal waste management, rather than provide a general study of animal care and the systems related to their growth and management.

Agricultural Production/Processing

Agricultural Production

Agricultural Production courses combine content related to animal and plant production, providing comprehensive coverage of the production functions of the agricultural industry. These courses typically cover such topics as care and management of farm animals, crop production and harvesting, plant and animal insect and disease control, efficient resource management, and farm management.

Agricultural Processing

Agricultural Processing courses impart the knowledge and skills needed to bring animal and plant products to market. They may cover a wide variety of topics, including care and maintenance of animals or plants, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Agricultural Processing courses may present an overview of agricultural processing or may specialize in particular types of products.

Plant Processing

Plant Processing courses impart the knowledge and skills needed to bring plant products to market. They may cover a wide variety of topics, including plant production, quality selection and preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Plant Processing courses may present an overview of product processing or may specialize in specific plant products.

Animal Processing

Animal Processing courses impart the knowledge and skills needed to bring animal products to market. Although these courses may present an overview of animal care and maintenance, they typically emphasize quality selection, product preservation, equipment care and sanitation, government regulations, and marketing and consumer trends. Animal Processing courses may present an overview of several types of animal products or may specialize in particular products, such as meat, leather, wool, dairy products, and so on.

Food Product Processing

Food Product Processing courses impart the knowledge and skills needed to produce and manufacture food products for the consumer market. These courses focus on food products while covering a variety of topics, such as quality selection and preservation, equipment care and sanitation, government regulations, marketing, consumer trends, and product research and development.

Agriculture and Society

Agriculture and Society courses provide an overview of the importance of, impact on, and relationships between agricultural endeavors and society at large. These courses typically emphasize economic and environmental factors and impacts (such as urban and agricultural water use) and the influences of society on agricultural endeavors (including production, processing,

and distribution). Current technological advances (such as genetic engineering) may also be discussed.

Agricultural Biotechnology

Agricultural Biotechnology courses apply biological principles and understanding to plant and animal science in order to produce or refine agricultural products. Course topics typically include but are not limited to microbiology, genetics, growth and reproduction, structural basis of function in living systems, chemistry of living systems, quantitative problem-solving, and data acquisition and display. These courses also often cover the ethics of biotechnology.

Particular Topics in Agricultural Production/Processing

These courses examine specific topics related to producing and processing agricultural products (such as meat cutting) rather than provide a general study of production or processing.

Natural Resources

Wildlife Management

Often with an emphasis on the conservation of natural resources and frequently including outdoor recreation topics, Wildlife Management courses provide students with the opportunity to understand and appreciate the importance of maintaining the land and ecological systems that enable nondomesticated animals to thrive. Wildlife Management courses emphasize how humans and animals may both take advantage of the same land or how to gain economic benefits from the land while not degrading its natural resources or depleting plant or animal populations.

Forestry

Forestry courses provide students with the information and experience necessary for the cultivation, management, and care of forests or timberlands. Forestry courses cover topics such as the processes of regeneration and reforestation, harvesting and conservation of natural resources, erosion and pest control, trail development and maintenance, mapping and surveying, operation of forestry tools, government regulations, environmental stewardship, and recreational use of forests.

Forestry Harvesting

Forestry Harvesting courses involve the study of methods to manage, protect, and harvest timber stands and specialty forest crops; equipment maintenance and repair; the selection, planting, transplanting, and harvesting of trees; forest management; and safety procedures.

Natural Resources Management

Natural Resources Management courses combine the fields of ecology and conservation with planning for the efficient use and preservation of land, water, wildlife, and forests. Within the general area of natural resources management, these courses usually cover specific topics and uses, such as hunting or fishing preserves, forest production and management, wildlife preservation, and human outdoor recreation.

Particular Topics in Natural Resources

These courses examine specific topics related to natural resources, such as urban forestry or hunter education, rather than provide a general study of natural resource principles and topics.

Transportation, Distribution and Logistics

Transportation Technology

Exploration of Transportation, Distribution, and Logistics

Exploration of Transportation, Distribution, and Logistics courses introduce students to careers that involve the planning, management, and movement of people, materials, and products using

any of several modes of transport. Such careers may also involve infrastructure, vehicular maintenance and repair, and operating or managing facilities that hold what is being transported. Therefore, specific course topics vary widely and depend upon the careers being explored.

Mechanics and Repair

Energy/Power

Energy/Power courses focus on one or several aspects of energy and power in transportation and work. Course content may include various sources of energy and their use in society (for example, characteristics, availability, conversion, storage, environmental impact, and socioeconomic aspects of various energy sources); principles involved in various means of energy transfer, such as electricity/electronics, hydraulics, pneumatics, heat transfer, and wind/nuclear/solar energies; and the transmission and control of power through mechanical or electrical devices such as motors and engines.

Power and Mechanics

Power and Mechanics courses enable students to understand the principles underlying various kinds of mechanics (aircraft, auto, diesel, and marine) and how energy is converted, transmitted, and controlled. Topics typically include maintaining and servicing machines, engines, and devices while emphasizing energy sources, electricity, and power transmission. The courses may also provide information on career opportunities within the field of mechanics and/or transportation.

Introduction to Automobiles

Primarily intended as a personal automobile mechanics course, but also useful for students exploring future careers in automotive technologies, Introduction to Automobiles courses expose students to the various mechanical systems in automobiles and provide basic experience in maintenance tasks. The course may also cover career opportunities in the automotive and/or transportation fields.

Automotive Mechanics—Comprehensive

Automotive Mechanics—Comprehensive courses emphasize the diagnosis and repair of automobile engines and support systems such as brakes, cooling, drive trains, electrical/electronics components, emission, fuel, ignition, steering, suspension, and transmissions. Course topics often include the comprehension and use of repair manuals, safety, and employability skills (including shop management and entrepreneurship).

Particular Topics in Automotive Mechanics

These courses provide instruction in the mechanics of a particular system or condition, such as transmissions, brakes, fuel, exhaust, or electrical systems, rather than providing a general study of diagnosis and repair of automobile mechanics.

Automotive Service

Automotive Service courses emphasize preventative auto maintenance and automobile troubleshooting. Course content typically includes tune-up, oil change, and lubrication skills; tire replacement, alignment, and balancing; and basic knowledge of brake, cooling, electrical, emission, fuel, ignition, steering, suspension, and transmission systems. These courses may also include public relations, sales techniques, and service station management.

Diesel Mechanics—Comprehensive

Diesel Mechanics—Comprehensive courses prepare students to maintain and repair diesel engines and related systems. Specific course topics may include principles underlying diesel engines, analyzing electrical circuits and systems, troubleshooting and repairing cooling systems, testing and repairing air conditioning charging systems, reading and interpreting service manuals,

and identifying the principles and components of fuel injection systems. Courses may also cover safety, employability skills, and entrepreneurship.

Particular Topics in Diesel Mechanics

These courses cover specific topics relevant to occupations involving the maintenance and repair of vehicles with diesel engines, such as buses and trucks. One topic (or several closely related topics) concerning diesel mechanics is covered in specific detail in this type of course.

Small Vehicle Mechanics

Small Vehicle Mechanics courses equip students with the knowledge and skill to repair and maintain engines in small vehicles (e.g., motorcycles, all-terrain vehicles, snowmobiles, and mopeds). Topics include (but are not limited to) maintaining frames and suspension, wheels and brakes, and drive trains; servicing fuel, exhaust, and electrical systems; performing tune-ups; and maintaining and repairing engines. Students may also learn safety on the job, employability skills, and entrepreneurship.

Small Engine Mechanics

Small Engine Mechanics courses provide students with the opportunity to learn how to service and recondition small engines, typically emphasizing two- and four-cycle engines. These courses provide students with opportunities to troubleshoot and repair speed controls, lubrication, ignition, fuel, power transfer, cooling, exhaust, and starting systems; use hand, power, and overhaul tools; and read and interpret service manuals and parts' catalogs. Applications may include lawn mowers, tractors, tillers, power tools, and so on.

Marine Mechanics

The content of Marine Mechanics courses includes the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems as applied to boat and/or ship engines; boat rigging; trailers; and marine-related merchandise. Courses may also cover communication, human relations, and employability skills, as well as safe, efficient work practices.

Heavy Equipment Mechanics

Heavy Equipment Mechanics courses include the service and repair of electrical, mechanical, power transfer, hydraulic, fuel, and cooling systems of heavy equipment such as that used in mining, construction, and utility industries.

Aircraft Power Plant

Aircraft Power Plant courses provide students with the information necessary to troubleshoot, test, repair, and install aircraft engines. Course content usually includes engine ignition, electrical, lubrication, cooling, exhaust, and fuel systems, along with aircraft instrumentation and safety features.

Aircraft Airframe

Aircraft Airframe courses offer students information and instruction related to the structure and mechanics of aircraft, typically including hydraulic, pneumatic, instrumental, fuel, electrical, cabin atmosphere, and landing gear systems. Aircraft Airframe courses may also cover aircraft metals and coverings and related welding skills.

Automotive Detailing and Reconditioning

Automotive Detailing and Reconditioning courses provide students with knowledge and skills related to repairing, refinishing, and detailing automobiles. Course topics typically include painting and refinishing, plastics and adhesives, damage analysis, and repair, in addition to occupational safety, employability, and entrepreneurship skills.

Automotive Body Repair and Refinishing—Comprehensive

> Automotive Body Repair and Refinishing courses provide students with knowledge and skills regarding the repair and refinishing of damaged or used cars. Course content may include (but is not limited to) stretching and shrinking auto body sheet metal; welding skills; frame and metal straightening; repair of fiberglass and synthetic materials; removing, repairing, and installing auto body parts such as panels, hoods, doors, and windows/glass; preparing vehicles and vehicle surfaces for refinishing; painting; applying body fillers; and estimating material and labor costs.

Particular Topics in Automotive Body Repair and Refinishing

> These courses provide specific instruction in individual topics relevant to the repair and refinishing of automobile bodies and surfaces. One topic or several closely related topics (such as non-structural part replacement, auto body welding, or plastic repair) receive particular attention in this type of course.

Boat Repair/Refinishing

> Boat Repair/Refinishing courses convey a broad range of information and skills about how to repair and refinish boat mechanics, structures, and surfaces. In these courses, students become proficient in marine terminology, learn how to describe types of marine manufacturing and occupations, and prepare new and existing wood, fiberglass, and metal surfaces for painting or refinishing. These courses often cover safety, employability skills, and entrepreneurship.

Distribution and Logistics

Distribution—Comprehensive

> Distribution—Comprehensive courses provide students with knowledge and skills related to the safe and efficient delivery of commodities to various markets. Course content typically includes the comparative advantages of various forms of transportation, distribution networks, processes for tracking large shipments of material, transportation of goods in a safe and secure manner, and packaging.

Warehouse Operations

> Warehouse Operations courses convey the principles and processes underlying the receiving, loading and unloading, tracking, and storing of large quantities of materials. Course topics typically include a variety of logistical implications for moving materials by several different modes of transportation, safety and security, and appropriate storage techniques.

Engineering and Technology

Engineering

Engineering Applications

> Engineering Applications courses provide students with an overview of the practical uses of a variety of engineering applications. Topics covered usually include hydraulics, pneumatics, computer interfacing, robotics, computer-aided design, computer numerical control, and electronics.

Engineering Technology

> Engineering Technology courses provide students with the opportunity to focus on one or more areas of industrial technology. Students apply technological processes to solve real engineering problems; develop the knowledge and skills to design, modify, use, and apply technology; and may also design and build prototypes and working models. Topics covered in the course include the nature of technology, use of technology, and design processes.

Principles of Engineering

Principles of Engineering courses provide students with an understanding of the engineering/technology field. Students typically explore how engineers use various technology systems and manufacturing processes to solve problems; they may also gain an appreciation of the social and political consequences of technological change.

Engineering—Comprehensive

Engineering—Comprehensive courses introduce students to and expand their knowledge of major engineering concepts such as modeling, systems, design, optimization, technology-society interaction, and ethics. Particular topics often include applied engineering graphic systems, communicating technical information, engineering design principles, material science, research and development processes, and manufacturing techniques and systems. The courses may also cover the opportunities and challenges in various branches of engineering.

Engineering Design

Engineering Design courses offer students experience in solving problems by applying a design development process. Often using solid modeling computer design software, students develop, analyze, and test product solutions models as well as communicate the features of those models.

Engineering Design and Development

Engineering Design and Development courses provide students with the opportunity to apply engineering research principles as they design and construct a solution to an engineering problem. Students typically develop and test solutions using computer simulations or models but eventually create a working prototype as part of the design solution.

Digital Electronics

Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices.

Robotics

Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

Computer Integrated Manufacturing

Computer Integrated Manufacturing courses involve the study of robotics and automation. Building on computer solid modeling skills, students may use computer numerical control (CNC) equipment to produce actual models of their three-dimensional designs. Course topics may also include fundamental concepts of robotics, automated manufacturing, and design analysis.

Technology

Technological Literacy

Technological Literacy courses expose students to the communication, transportation, energy, production, biotechnology, and integrated technology systems and processes that affect their lives. The study of these processes enables students to better understand technological systems and their applications and uses.

Technological Processes

Technological Processes courses provide students with the opportunity to focus on one or more areas of industrial technology, applying technological processes to solve real problems and developing the knowledge and skills to design, modify, use, and apply technology appropriately. Students may examine case studies, explore simulations, or design and build prototypes and working models.

Emerging Technologies

> Emerging Technologies courses emphasize students' exposure to and understanding of new and emerging technologies. The range of technological issues varies widely but typically include lasers, fiber options, electronics, robotics, computer technologies, CAD/CAM, communication modalities, and transportation technologies.

Technology Innovation and Assessment

> Technology Innovation and Assessment courses use engineering design activities to help students understand how criteria, constraints, and processes affect design solutions and provide students with the skills to systematically assess technological developments or solutions. Course topics may include brainstorming, visualizing, modeling, simulating, constructing, testing, and refining designs.

Particular Topics in Technology Applications

> These courses examine specific topics in technology applications other than those already described.

Drafting

Drafting Careers Exploration

> Geared for students with an interest in careers that use drafting skills and applications, Drafting Careers Exploration courses expose students to the opportunities available for draftspeople (engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere.

Drafting—General

> Drafting—General courses, usually offered as a sequence of courses, introduce students to the technical craft of drawing illustrations to represent and/or analyze design specifications and then refine the skills necessary for this craft. Drafting—General courses use exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on). Computer-aided drafting (CAD) systems are typically introduced and used to fulfill course objectives.

CAD Design and Software

> Frequently offered as an intermediary step to more advanced drafting courses (or as a concurrent course), CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

Blueprint Reading

> Blueprint Reading courses provide students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

Personal Development and Transition

School Skills

Study Skills

> Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include

reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.

School Orientation (MAGIC)

School Orientation courses provide students with an introduction to the culture of their school so that they understand staff expectations and the school's structure and conventions. These courses may vary widely according to the philosophy, aims, and methods of each school.

Community Service

Community Service courses provide students with the opportunity to volunteer their time, energy, and talents to serve a community project or organization. These courses are usually (but not always) conducted with a seminar component, so that students can use their volunteer experiences to learn how to solve problems, make decisions, and communicate effectively.

Career Exploration/Development

Career Exploration

Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.

Employability Skills

Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

Diversified Occupations

Diversified Occupations courses help students enter the workforce through career exploration, job search and application, and the development of positive work attitudes and work-related skills. These courses typically cover such topics as career planning and selection, money management, communication skills, interpersonal business relationships and behaviors, and personal responsibility. Employment may be a required component of these courses, or students may be required to enroll concurrently in a work experience course.

Family and Life

Food and Nutrition

Food and Nutrition courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career-related.

Child Development/Parenting

Child Development/Parenting courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age. In addition, these courses help students discover how parents should respond to the various stages of childhood. Course content typically includes topics such as prenatal and birth processes; responsibilities and difficulties of parenthood; fundamentals of children's emotional and physical development; and the appropriate care of infants, toddlers, and young children.

Life Skills

Life Skills courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize such topics as goal-setting, decision-making, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.

Self-Management

Self-Management courses introduce students to the skills and strategies helpful in becoming more focused, productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. They may also allow students to explore various career and lifestyle choices.

Family Living

Family Living courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These courses often emphasize (but are not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. They may also cover topics related to individual self-development, career development, personal awareness, and preparation for the responsibilities of a family member and wage earner.

Personal Development

Similar to Family Living courses, but more focused on the individual, Personal Development courses emphasize strengthening self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with changes within one's self and within others. These courses may also have a substance-abuse prevention component.

Consumer Economics/Personal Finance

Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.

Community Living

Community Living courses place a special emphasis on the student's relationship to the surrounding community. Instruction varies with the students and their needs; however, these courses provide the skills necessary for independent functioning within the surrounding environment. Course topics may also include available community resources and how to access them, emergency skills, and independent living strategies.

Communication Instruction

Communication Instruction courses are typically individualized according to each student's condition and needs. Increasing the student's communication skills—oral expression, listening comprehension, reading, and writing—is emphasized; communication techniques in several areas (educational, social, and vocational) are often explored.

Social Development Instruction

Social Development Instruction courses teach students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.

Values Clarification

> Values Clarification courses enable students to explore individual and societal actions and implications in order to help them develop personal values and make decisions about their lives. Examples of discussion topics include philosophy and religion, world resource allocation, genetic engineering, environmental issues, and death-related issues (euthanasia, suicide, and abortion).

APPENDIX A: Rosetta Stone for Student Learning Outcomes, Habits of Mind & 21st Century Skills

SLO: Students will exhibit critical thinking.

HOM: Thinking about Thinking
- Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- Analyze how and why individuals, events and ideas develop and interact over the course of a text.
- Elaborate, refine, analyze and evaluate their own ideas in order to improve and maximize creative efforts.
- Consider the available tools when solving a problem and make sound decisions about when each tool might be helpful.
- Demonstrate integrity and ethical behavior in using influence and power.

HOM: Thinking flexibly
- Interpret words and phrases as they are used in a text, including determining technical, connotative and figurative meanings, and analyze how specific word choices shape meaning or tone.
- Analyze the structure of texts, including how specific sentences, paragraphs and larger portions of the text (e.g., a section, chapter, scene or stanza) relate to each other and the whole.
- Assess how point of view or purpose shapes the content and style of a text.
- Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems.
- Create a coherent representation of the problem at hand, consider the units involved and their meanings and use different operations to solve the problem.
- Incorporate feedback effectively.
- Exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal.

HOM: Creating, Imagining and Innovating
- Integrate and evaluate content presented in diverse media and formats, including visually and qualitatively, as well as in words (spoken and written).
- Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
- Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur.
- Understand and use stated assumptions, definitions and previously established results to construct arguments and build a logical progression of statements to explore the truth of their arguments.
- Solve different kinds of non-familiar problems in both conventional and innovative ways.

HOM: Questioning and Posing Problems

- Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
- Use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation.
- Identify and ask significant questions that clarify various points of view and lead to better solutions.
- Compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and explain what the flaw if there is one.
- Listen or read the arguments of others, decide whether the arguments make sense and ask useful questions to clarify or improve the arguments.
- Understand both how and why media messages are constructed and for what purposes.

SLO: Students will articulate thoughts by means of various modes of communication.

HOM: Listening with Understanding & Empathy

- Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions.
- Communicate effectively in diverse environments (including multi-lingual).
- Know when it is appropriate to listen and when to speak.
- Respect cultural differences and work effectively with people from a range of social and cultural backgrounds.
- Examine how individuals interpret messages differently, how values and points of view are included or excluded, and how media can influence beliefs and behaviors.
- Evaluate a speaker's point of view reasoning and use of evidence and rhetoric.
- Understand and effectively utilize the most appropriate expressions and interpretations in diverse, multi-cultural environments.

HOM: Thinking & Communicating with Clarity and Precision

- Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
- Write arguments to support claims in an analysis of substantive topics, using valid reasoning and relevant and sufficient evidence.
- Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization and analysis of content.
- Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.
- Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.
- Use clear definitions in discussion with others and in their own reasoning.

HOM: Finding Humor

- Change perspective, usually rapidly, and in a way that allows the individual to see a situation in a light that is unusual, incongruous or, in short, humorous.
- See things from a different perspective that allows him/herself and others to see the humor.
- Reflect on the actions, or the situation they find themselves in, and look for the funny perspective. This doesn't mean they make light of what might be a serious situation, only that they use humor as a tool to help better deal with difficult situations.
- Able to laugh at themselves.

HOM: Gathering Data through All the Senses

- Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

- Use technology as a tool to research, organize, evaluate and communicate information.
- Manage the flow of information from a wide variety of sources.
- Draw evidence from literary or informational texts to support analysis, reflection and research.
- Use digital technologies (computers, PDAs, media players, GPS, etc.), communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy.

SLO: Students will analyze their own actions and work effectively with others in groups, society, and culturally diverse situations.

HOM: Thinking Interdependently
- Demonstrate ability to work effectively and respectfully with diverse teams.
- Understand, negotiate and balance diverse views and beliefs to reach workable solutions, particularly in multi-cultural environments.
- Use interpersonal and problem-solving skills to influence and guide others toward a goal.
- Leverage strengths of others to accomplish a common goal.
- Leverage social and cultural differences to create new ideas and increase both innovation and quality of work.
- Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- Prepare for participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- Act responsibly with interests of the larger community in mind.
- Inspire others to reach their very best via example and selflessness.

HOM: Managing impulsivity
- Monitor, define, prioritize and complete tasks without direct oversight.
- Prioritize, plan and manage work to achieve the intended result.
- Apply a fundamental understanding of the ethical/legal issues surrounding the access and use of information, media and technology.
- Balance tactical (short-term) and strategic (long-term) goals.
- Conduct themselves in a respectable, professional manner.

HOM: Responding with Wonderment and Awe
- Respond open-mindedly to different ideas and values.
- Deal positively with praise, setbacks and criticism.

HOM: Striving for Accuracy
- Express answers with a degree of precision appropriate for the context.
- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- Demonstrate command of the conventions of Standard English capitalization, punctuation and spelling when writing.
- Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.
- Read and comprehend complex literary and informational texts independently and proficiently.

- Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

SLO: Students will plan for the future through utilization of knowledge of responsible choices.

HOM: Applying Past Knowledge to New Situations
- Reflect critically on past experiences in order to inform future progress
- Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning and style and to comprehend more fully when reading or listening.
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts and consulting general and specialized reference materials, as appropriate.
- Demonstrate understanding of figurative language, word relationships and nuances in word meanings.
- Evaluate information critically and competently.

HOM: Remaining open to Continuous Learning
- Adapt to varied roles, jobs responsibilities, schedules and context.
- Go beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities to gain expertise.
- Demonstrate commitment to learning as a lifelong process.
- Demonstrate initiative to advance skill levels towards a professional level.
- Use information accurately and creatively for the issue or problem at hand.

HOM: Persisting
- Write routinely over extended frames (time for research, reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes and audiences.
- Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- Access information efficiently (time) and effectively (sources).
- Set and meet goals, even in the face of obstacles and competing pressure.
- Utilize time and manage workload efficiently.

HOM: Taking Responsible Risks
- Set goals with tangible and intangible success criteria.
- Work effectively in a climate of ambiguity and changing priorities.
- View failure as an opportunity to learn; understand that creativity and innovation is a long-term, cyclical process of small successes and frequent mistakes.
- Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas.
- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

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Vermont State Board of Education

Education Quality Standards

State Board Rule 2000

Prepared for adoption on December 17, 2013

The purpose of these rules is to ensure that all students in Vermont public schools are afforded educational opportunities that are substantially equal in quality, and enable them to achieve or exceed the standards approved by the State Board of Education.

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2110   Statement of Purpose

The purpose of these rules is to ensure that all students in Vermont public schools are afforded educational opportunities that are substantially equal in quality, and enable them to achieve or exceed the standards approved by the State Board of Education.

These rules are designed to ensure continuous improvement in student performance, instruction and leadership to enable students to attain rigorous standards in high-quality programs.

Nothing herein shall be construed to entitle any student to educational programs or services identical to those received by other students in the same or different school districts. Further, nothing herein shall create a private right of action. These rules are in addition to and, unless otherwise specifically stated, do not supersede other rules contained in the Vermont State Board of Education Manual of Rules and Practices.

2111   Adoption of Performance Standards

Pursuant to 16 V.S.A. §164(9), the State Board of Education will implement and periodically update standards for student learning in appropriate content areas from kindergarten to grade 12. Supervisory union boards shall use the standards as the basis for the development and selection of curriculum, methods of instruction, locally developed assessments, and the content and skills taught and learned in school.

2112   Education Quality Standards

In order to carry out Vermont's policy that all public school children will be afforded educational opportunities which are substantially equal in quality, and in order to ensure continuous improvement in student performance, each public school shall meet the following education quality standards, and annually report to the community in an understandable and comprehensive form as required in 16 V.S.A. §165(a)(2).

2113   Federal and State Entitlements; Nondiscrimination

Each school or supervisory union shall ensure that students are furnished educational and other services in accordance with state and federal entitlements and requirements.

No student in a public school or independent school shall be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity as the result of, or based upon, the student's race, gender, color, creed, national origin, marital status, sexual orientation, gender identity or disability, or any other reason set forth in state or federal non-discrimination requirements.

Each supervisory union shall develop, and each school shall implement, a system of maintaining student records that aligns with Agency of Education statewide data collections; which enables accurate and timely reporting in connection with state and federal data collection requirements; and ensures the accuracy, relevancy and confidentiality thereof, and accessibility thereto; and which is in compliance with the federal Family Education Rights and Privacy Act of 1974 (P.L. 95-380 as amended from time to time).

Student records shall be safely retained. For grades 9-12, the transcripts of graduates and dropouts shall be permanently maintained and the academic records may be permanently maintained.

Each school shall adopt and implement policies consistent with the federal Protection of Pupil Rights Act (20 U.S.C. §1232h) regarding surveys, analyses and evaluations.

2114   Definitions

The following definitions shall apply to these rules unless the context clearly requires otherwise:

1. "Academic record" may include standardized test scores, dates of attendance, alternate graduation plan, Personalized Learning Plan, rank in class, awards, activities, clubs and other information not included in a student's transcript, as locally determined.

2. "Applied learning" means the presentation of subject matter in a way that integrates a particular academic discipline (such as mathematics, science or English) with life experiences both in school and out of school and with personal

workforce applications.

3. "Appropriately licensed educator" means any teacher or administrator requiring a license under 16 V.S.A. Chapter 51 and in accordance with the Rules Governing the Licensing of Educators and the Preparation of Educational Professionals.

4. "Career and Technical Education" means an educational program that supports attainment of a high school diploma, designed to provide students with technical knowledge, skills and aptitudes that will prepare them for further education and enhance their employment options or lead to an industry-recognized credential.

5. "College and Career Readiness" means the student's ability to enter the workforce or pursue postsecondary education or training without the need for remediation. The student must possess the foundational skills and learning strategies necessary to begin studies in a career pathway in order to be considered college and career ready.

6. "Educational Technology" means instruction and/or preparation in the appropriate use of current technology to provide students with the knowledge and skills needed to communicate, solve problems, and to access, manage, integrate, evaluate and create information.

7. "Mentoring" means the pairing of a mentor with an educator who is either new to the profession or new to the school in order to provide training, orientation, assistance and support. Further, for the purposes of this rule, a "mentor" is an educator who has demonstrated high-quality instructional practice and who has been provided training in mentoring.

8. "Needs-based professional learning" means staff learning based upon needs identified through an examination of student performance and organizational and instructional data, and which is aligned with the school's Continuous Improvement Plan.

9. "Personalized Learning Plan" means a plan developed on behalf of a student by the student, a representative of the school, and, if the student is a minor, the student's parents or legal guardian, and updated at least annually. The plan shall be developmentally appropriate and shall reflect the student's emerging abilities, aspirations, interests and dispositions. Beginning no later than in the seventh grade, the plan shall define the scope and rigor of academic and experiential opportunities necessary for the student to successfully complete secondary school and attain college and career readiness.

10. "Proficiency-based learning" and "proficiency-based graduation" refers to

systems of instruction, assessment, grading and academic reporting that are based on students demonstrating mastery of the knowledge and skills they are expected to learn before they progress to the next lesson, get promoted to the next grade level, or receive a diploma.

11. "School" means an organizational structure designed to facilitate student learning. This could include an individual public school building or a combination of public school buildings with one administration, either of which could include learning opportunities both within and outside of the school building and school day. Where the context suggests that a "school" take some action, the action shall be taken by the superintendent or such school officials as are designated by the superintendent, unless otherwise specified herein or elsewhere in law or regulation. "School" includes a technical center.

12. "Secretary" means the Secretary of Education or his or her designee.

13. "Superintendent" means the superintendent of schools or person or persons assigned the duties of a superintendent pursuant to 16 V.S.A. §242.

14. "Supervisory union" means an administrative, planning, and educational service unit created by the State Board of Education, which consists of two or more school districts, including a supervisory district. For the purpose of these rules, supervisory union also means a supervisory district which consists of only one school district, which may be a unified union district.

15. "Technology Integration" means the infusion of technology into the curriculum as a tool to enhance learning in a content area or multidisciplinary setting, enabling students to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally.

16. "Transcript" means a formal document certifying and documenting a student's or former student's achievement of state standards and at minimum includes the student's name, date of birth, last known address, years of attendance, courses taken, out-of-school learning opportunities if applicable, and diploma or certificate of completion awarded.

17. "Transferable skills" refers to a broad set of knowledge, skills, work habits, and character traits that are believed to be critically important to success in today's world, particularly in collegiate programs and modern careers.

2120   Curriculum and Instruction

2120.1   Instructional Practices

Instructional practices shall promote personalization for each student, and enable each student to successfully engage in the curriculum and meet the graduation requirements. Classroom instruction shall include a range of research-based instructional practices that most effectively improve student learning, as identified by national and Vermont guidance and locally collected and analyzed student data.

2120.2   Flexible Pathways

Schools must provide students the opportunity to experience learning through flexible and multiple pathways, including but not limited to career and technical education, virtual learning, work-based learning, service learning, dual enrollment and early college. Learning must occur under the supervision of an appropriately licensed educator. Learning expectations must be aligned with state expectations and standards.

Students must be allowed to demonstrate proficiency by presenting multiple types of evidence, including but not limited to teacher- or student-designed assessments, portfolios, performances, exhibitions and projects.

2120.3   Career and Technical Education

Schools serving grades 9-12 shall coordinate with their designated career and technical education center to ensure genuine access and support for all eligible students as required in 16 V.S.A. 1541a.

Schools shall ensure that students receive appropriate career counseling and program information regarding the availability of education and apprenticeship program offerings at career and technical centers. Demonstrations of learning such as credits or grades earned in an approved career and technical education course or program are subject to the requirements of 16 V.S.A. §1545.

2120.4   Personalized Learning Plans

As required in 16 V.S.A. 941, schools shall ensure all students in grades seven through 12 shall have a Personalized Learning Plan, which shall be a written document developed by the student, a representative of the school and, if the student is a minor, the student's parent or legal guardian. The Personalized Learning Plan shall describe

the scope and rigor of learning opportunities and support services necessary for the student to achieve college and career readiness prior to graduation, and to attain a high school diploma. This plan must be reviewed at least annually.

This section is effective in accordance with the rolling implementation dates established in Section 14 of Act 77 of 2013, as may be amended.

2120.5   Curriculum Content

Each supervisory union board shall ensure the written and delivered curriculum within their supervisory union is aligned with the standards approved by the State Board of Education. Each school shall enable students to engage annually in rigorous, relevant and comprehensive learning opportunities that allows them to demonstrate proficiency in

a. literacy (including critical thinking, language, reading, speaking and listening, and writing);
b. mathematical content and practices (including numbers, operations, and the concepts of algebra and geometry by the end of grade 10);
c. scientific inquiry and content knowledge (including the concepts of life sciences, physical sciences, earth and space sciences and engineering design);
d. global citizenship (including the concepts of civics, economics, geography, world language, cultural studies and history);
e. physical education and health education as defined in 16 V.S.A. §131;
f. artistic expression (including visual, media and performing arts); and
g. transferable skills (including communication, collaboration, creativity, innovation, inquiry, problem solving and the use of technology).

Each school shall provide students in grades K-8 with at least two physical education classes per week. Each school shall provide students in grades 9-12 with one and one-half years of physical education or the equivalent thereof.

Each school shall offer options for students in grades K-12 participate in at least 30 minutes of physical activity within or outside of the school day. Physical activity may include recess and movement built into the curriculum, but does not replace physical education classes.

Each school shall provide appropriate learning opportunities to all students to support

their attainment of the standards approved by the State Board of Education. As required in 16 V.S.A. §2902, each public school shall provide support for students who require additional assistance in order to succeed or be challenged in the general education environment.

Each school shall provide comprehensive elementary and secondary health and physical education learning experiences, including the effects of tobacco, alcohol and drugs on the human system for all students in accordance with sections 16 V.S.A. § 131 and §906(b)(3).

Each school shall ensure students are able to access academic and experiential learning opportunities that reflect their emerging abilities, interests and aspirations, as outlined in the students' Personalized Learning Plans.

2120.6   Curriculum Coordination

As required by 16 V.S.A. §261a(a)(1), the board of each supervisory union shall ensure that each school implements the supervisory union's written and delivered curriculum, which shall be
   a. aligned with the standards approved by the State Board of Education;
   b. coordinated across all grades to prepare students for graduation;
   c. coordinated across the supervisory union, including sending high schools and technical centers;
   d. informed by ongoing review of new research, changing learning opportunities, and updates to the standards approved by the State Board of Education;
   e. designed to enable all students to achieve the graduation requirements; and
   f. integrated with technology across all disciplines.

Each school with a pre-kindergarten early education program must offer high-quality programs as outlined in State Board Rule 2600.

2120.7   Graduation Requirements

A student meets the requirements for graduation when the student demonstrates evidence of proficiency in the curriculum outlined in 2120.5, and completion of any other requirements specified by the local board of the school attended by the student.

This requirement is effective no later than September 2014 for students entering seventh grade and through their secondary school progression, for the anticipated graduation date of June 2020, and with each subsequent incoming seventh grade class.

For students eligible for special education services under IDEA or protected by Section 504 of the federal Rehabilitation Act, the student shall meet the same graduation requirements as non-disabled peers in an accommodated and/or modified manner. These modifications will be documented in each student's Personalized Learning Plan.

The Individual Education Program (IEP) team or 504 Team is responsible for assuring that information regarding the student's individual skills, aptitudes and present levels of performance are incorporated into the student's Personalized Learning Plan. This shall ensure that the proficiency levels to meet graduation requirements are linked to local graduation requirements, individually accommodated and/or modified for students with disabilities, and written into the student's Personalized Learning Plan.

This process shall ensure that any student identified as a student with a disability will receive a regular high school diploma after meeting his/her individual graduation requirements as outlined in their Personalized Learning Plan. The development of an IEP does not supplant a Personalized Learning Plan, nor does a Personalized Learning Plan replace an IEP.

2120.8   Local Graduation Requirements

Each secondary school board is responsible for setting graduation requirements in accordance with these rules.

Local graduation policy must define proficiency-based graduation requirements based on standards adopted by the State Board of Education. As required in 16 V.S.A. 261a(a)(1), it is the responsibility of the supervisory union board to ensure alignment in expectations for all students within a supervisory union.

Schools may or may not use credits for the purposes of demonstrating that a student has met the graduation requirements. When used, credits must specify the proficiencies demonstrated in order to attain a credit and shall not be based on time spent in learning. Further, students may receive credit for learning that takes place outside of the school, the school day, or the classroom. Any credits earned must occur under the supervision of an appropriately licensed educator.

2121   Professional Resources

2121.1 School Leadership

The roles and responsibilities of the school's leadership, including the school board, superintendent and principal or career and technical center director shall conform to applicable provisions in 16 V.S.A. regarding authority and duties.

All school leaders must have sufficient time to carry out their responsibilities in order to focus on improving student learning. To accomplish that, the superintendent or his or her designee must:

a. supervise a licensed principal who shall be responsible for the day-to-day leadership of the school;

b. create a school leadership team consisting of administrators and teachers (and students as appropriate) with compensation either in time or financial reimbursement or a combination of both for all teachers;

c. create professional learning groups for all teachers that meet during school time at least two hours per month and are facilitated by trained teachers;

d. coordinate the principal's schedule to enable him/her to engage in student learning, such as:
   1. teaching a course or hosting an advisory with students;
   2. mentoring a group of students in developing their Personalized Learning Plans;
   3. providing support for students through support services; or
   4. other methods of student engagement as approved by the superintendent.

e. provide teacher support and evaluation aligned with the guidelines approved by the State Board of Education; and

f. minimize, as much as possible, supervision of non-teaching staff by the principal.

The principal shall be answerable to the superintendent in the performance of his or her duties.

Schools with 10 or more full-time equivalent teachers shall employ a full-time licensed principal. Schools with fewer than 10 FTE teachers shall employ a licensed principal on a pro-rata basis.

2121.2   Staff

As required in 16 V.S.A. §1692, all professional staff shall be licensed and appropriately endorsed for their assignment. All classroom staff, including educational support personnel, shall have had adequate academic preparation and training to teach or provide services in the area to which they are assigned.

Each school shall employ instructional and administrative staff members who possess the knowledge and skills to implement the standards in alignment with professional educator standards established by the Vermont Standards Board for Professional Educators.

Each supervisory union shall employ licensed special education staff, and shall ensure each school employs sufficient and qualified staff as needed to identify students eligible for special education services and to implement each eligible student's Individual Education Program and Section 504 plan.

Classes in grades K-3, when taken together, shall average fewer than 20 students per teacher. In grades 4-12, when taken together, classes shall average fewer than 25 students per teacher. The total class roll of a teacher shall not exceed 100 students, except where the specific nature of the teacher's assignment (such as in certain art, music, or physical education programs) is plainly adaptable to the teaching of greater numbers of students while meeting the educational goals of the program.

School boards must establish optimum class size policies as consistent with statutory guidance from the Agency of Education. Class size must comply with state and federal safety requirements.

The services of a certified library media specialist shall be made available to students and staff. Schools with over 300 students shall have at least one full-time library media specialist and sufficient staff to implement a program that support literacy, information and technology standards. Schools with fewer than 300 students shall employ a library media specialist on a pro-rata basis.

2121.3   Needs-Based Professional Learning

Each supervisory union shall develop and implement a system of appropriate needs-based professional learning for all professional staff, including administrators and other staff involved in student instruction, as required in 16 V.S.A. §261a(a)(5). Time for professional learning should be embedded into the school day.

The school's professional learning system shall be aligned with its staff evaluation and supervision policies, Continuous Improvement Plan, supervisory union and district goals, and shall provide new staff members with appropriate opportunities for professional learning.

Mentoring shall be a component of each supervisory union's needs-based professional learning system. The superintendent or their designee shall determine the specifics of each mentoring program in their school(s) in accordance with the guidelines set by the State Board of Education, Vermont Standards Board for Professional Educators, and state law addressing mentoring for educators.

2121.4   Staff Evaluation

For the purposes of this section, "staff" includes administrators, educators, and other school employees working with students.

Staff evaluation programs and policies shall be designed and implemented with the goal of improved student outcomes. Such programs and policies shall

a. be consistent with the provisions of state and federal law and the Vermont Guidelines of Teacher and Leader Effectiveness adopted by the State Board of Education;

b. include multiple sources of evidence to inform and measure teacher performance;

c. address the professional learning needs of all staff, including administrators;

d. address the needs of teachers who are new to the profession, the assignment or the school;

e. provide supports to improve instructional practice, content knowledge, working relationships (with colleagues, parents and community members), and other

areas as appropriate.

2121.5   Tiered System of Support

In accordance with 16 V.S.A. §2902 and State Board Rule 2194, each school shall ensure that a tiered system of academic and behavioral supports is in place to assist all students in working toward attainment of the standards. This system shall be aligned with the school's Personalized Learning Plan structures, and specific student support services shall be specified within a student's Personalized Learning Plan.

School counseling services shall support the mission and vision of the school and shall be available to all students K-12. The school counseling services shall address students' academic, career, personal and social development. Such services shall be aligned and integrated with the work of other professionals in the school setting, as well as those in other educational and human services.

Staffing shall be filled by licensed school counselors and other student support personnel with sufficient staff to carry out the school counseling services, such as guidance counselors, Student Assistance Program counselors, home-school coordinators, English-as-a-Second-Language coordinators and school-based clinicians. At the elementary level, there shall be no more than 300 students per school counselor and other student support personnel. Schools with fewer than 300 students shall employ a school counselor and other student support personnel on a pro-rata basis. At the secondary level, there shall be no more than 200 students per school counselor and other student support personnel.

Health services, including health appraisal and counseling, communicable disease control, mental health, and emergency and first aid care, shall be made available in a confidential manner to students in each school. These health services shall be delivered in accordance with the school district's written policies and procedures, which shall be developed in collaboration with parents and community health resources.

The Vermont Department of Health recommends that schools and supervisory unions implement the School Nurse Leader School Health Services Delivery Model, which is consistent with the principles of the national Coordinated School Health Model, to ensure appropriate access and coverage across their district or supervisory union.

Each school shall engage the services of a person licensed as a School Nurse or

Associate School Nurse. There shall be no more than 500 students per school nurse. Schools with fewer than 500 students shall employ a nurse on a pro-rata basis.

The school shall comply with requirements of state law relative to vision and hearing screening, immunization, and child abuse reporting, and federal law relating to invasive physical examinations in accordance with the Protection of Pupil Rights Act (20 U.S.C.§1232h).

2121.6   Interagency Teams

Schools shall participate in interagency teams as required by 33 V.S.A. §4303 and any other requirement of law.

2122   Learning Environment

2122.1 School Facilities and the Learning Environment

Each school shall maintain a safe, orderly, civil, flexible and positive learning environment, which is free from hazing, harassment and bullying and based on sound instructional and classroom management practices and clear discipline and attendance policies that are consistently and effectively enforced.

The design and operation of the school facilities shall be in full compliance with all state and federal fire, health, and safety, chemical and architectural standards.

Each school's comprehensive plan for responding to student misbehavior, as required by 16 V.S.A. §1161a(a), shall address student behavior, language, classroom attendance, clothing and treatment of property, as well as consequences for violations of policy and shall be clear and consistently enforced.

Each school shall observe due process requirements as set forth in Rule 4300 *et seq*.

2122.2 Access to Instructional Materials

Each school shall:
   a. provide a learning environment with sufficient supplies and infrastructure to allow for learning;
   b. develop, maintain, and expand as needed a collection of print, digital and

technology resources, administered by a certified school library media specialist;

c. ensure that the curriculum is supported by necessary digital and print resources;

d. ensure that students, teachers, administrators and paraprofessionals have access to an organized collection of digital and print materials sufficient and appropriate to support all students in meeting or exceeding the current state and national standards at no cost to the student;

e. provide students access to the library on a regular basis to use materials for reading, research, and for instruction in the skills needed to select and use information effectively;

f. provide access to a variety of up-to-date information, assistive, and other technology to support students in meeting or exceeding the standards;

g. provide broadband Internet service for students and educators to access educational resources;

h. adopt and implement written policies on electronic resources, acceptable Internet usage, and procedures for handling complaints for both staff and students;

i. support a schedule that provides opportunities for a library media specialist to collaborate with teachers as they integrate information research skills into their curriculum; and

j. ensure that students are afforded the opportunity to learn the skills to locate, evaluate, synthesize, and to present information and ideas within content areas using technology integration.

2123   State and Local Comprehensive Assessment System

2123.1 Participation in the State Comprehensive Assessment System

Each school shall administer assessments of student performance using methods developed by the State Board of Education under 16 V.S.A. §164 (9). Students who are unable to participate in district or state assessments shall be given an alternate assessment in accordance with law. Each school shall account for 100 percent of its students in regard to their participation in the state assessments.

2123.2 Development and Implementation of Local Comprehensive Assessment System

Each supervisory union shall develop, and each school shall implement, a local comprehensive assessment system that

    a. assesses the standards approved by the State Board of Education;
    b. employs a balance of assessment types, including but not limited to, teacher- or student-designed assessments, portfolios, performances, exhibitions and projects;
    c. includes both formative and summative assessments;
    d. enables decisions to be made about student progression and graduation, including measuring proficiency-based learning;
    e. informs the development of Personalized Learning Plans and student support;
    f. provides data that informs decisions regarding instruction, professional learning, and educational resources and curriculum; and
    g. reflects strategies and goals outlined in the district's Continuous Improvement Plan.

The performance criteria of the assessment system shall be clear and be communicated to teachers, administrators, students, parents and other community members. Students and parents shall be informed at least annually regarding progress toward achieving the standards.
This includes providing information in students' native languages or otherwise accessible formats.

Implementation and support by the Agency will be determined by the Secretary.

2124 Reporting of Results

As required in 16 V.S.A. 165(a)(2), each school shall report student and system performance results to the community at least annually in a format selected by the school board. The report shall at minimum include those elements listed in 16 V.S.A. 165a(2)(A-K).

The performance criteria of the school shall be clear and communicated to administrators, educators and other building staff.

Each supervisory union shall establish a secure student data system that enables regular access for teachers and administrators. Teachers shall have access to data on individual students whom they teach and aggregate data on student and system performance results. Administrators shall have access to individual student data and on student and system performance results.

For aggregate school data, in no case shall personally identifiable information on any student be revealed.

2125   Continuous Improvement Plan

A Continuous Improvement Plan, as required in 16 V.S.A. §165, shall be developed and implemented in each public school district. The plan shall be designed to improve the performance of all students enrolled in the district. If a school district comprises more than one school building, a combined plan for some or all the buildings may be developed. The plan, however, may reflect the different needs of individual schools.

The plan should be the overall planning and implementation document for the school, incorporating other planning requirements (either from the state, the federal government, local requirements, or external grant requirements) into a single planning document.

The plan shall be developed with the involvement of school board members, students, teachers, administrators, parents and other community members. The plan shall be reviewed at least annually for effectiveness toward meeting the stated goals, and shall be revised as necessary.

The plan shall include indicators provided by the Vermont Agency of Education as well as additional indicators determined locally. These indicators will identify student performance data obtained from state and local assessments and other information related to student performance which may include, but is not limited to, dropout and retention rates, attendance, course enrollment patterns and graduation rates. Indicators may also include data on school practices and leadership.

Agency support shall be differentiated in accordance with school needs, and shall work to reduce interventions for schools where student performance data indicates growth and success.

The school board shall approve the plan, which at minimum shall contain
   a. goals and objectives for improved student learning;
   b. educational strategies and activities specifically designed to achieve these goals, including professional learning of administrative and instructional staff;
   c. strategies and supports to ensure the school maintains a safe, orderly, civil and positive learning environment which is free from harassment, hazing and

bullying; and

d. required technical assistance from the Vermont Agency of Education as appropriate or determined by law.

2126   System for Determining Compliance with Education Quality Standards

2126.1 Filing of Continuous Improvement Plan

On a two-year cycle published by the Agency, each school is required to file a copy of the school's Continuous Improvement Plan for the current school year. This includes listing of the indicators (both those required by the Vermont Agency of Education and additional indicators as desired for use by the school) used for reflection and creation of the school's Continuous Improvement Plan; a description of the accomplishments, progress and changes regarding goals and strategies from the previous year's Continuous Improvement Plan and other evidence of meeting Education Quality Standards.

2126.2 Review, Secretary's Recommendations, and State Board Action

The Vermont Agency of Education will conduct a review of all Vermont schools using one or more of the following strategies:

1. All Continuous Improvement Plans will be reviewed by Agency staff, with assistance from other Vermont educators in a peer review process, as required or desired. Each school will receive feedback from this review.

2. To meet the state accountability standards (which comply with federal accountability requirements), schools will be expected to develop and revise their Continuous Improvement Plan based on the Secretary's recommendations, accountability status and student outcomes. The Agency may choose to differentiate support and requirements for individual schools based on identified needs.

3. On an annual basis, the Agency will identify schools for an Education Quality Standards Review. All schools, regardless of accountability status, will be eligible for this review. The Secretary of Education will determine the requirements and outcomes of this review, including a peer review system between schools. The review will be based on the requirements of this rule to ensure equity and improved outcomes for students.

2126.3 Further Review; Secretary's Recommendations; State Board Action

As required in 16 V.S.A. 165 (b), every two years the Secretary shall determine whether students in each Vermont public school are provided educational opportunities substantially equal to those provided in other public schools. If the Secretary determines that a school is not meeting the quality standards, he or she shall recommend actions that a district must take and offer technical assistance. If the school fails to meet the standards or make sufficient progress by the end of the next two-year period, recommendations will be made to the State Board of Education as outlined in 16 V.S.A. 165(b).

16 V.S.A. 165(f) regulates the process for an independent school to be designated as meeting Education Quality Standards, as well as the provision of technical assistance in the event that the State Board finds an independent school not meeting the standards or failing to make progress towards meeting the standards.

2127 Variance and Waiver

Upon written request of a school board, and after opportunity for hearing, the State Board of Education may approve an alternative method for meeting the requirements of these rules when
   a. the alternative method is consistent with the intent of the rule;
   b. the variance permits the school board to carry out locally-established objectives; and
   c. the granting of the variance does not contravene any state or federal law, any federal regulation, or any rule of any state agency other than the State Board of Education, unless such rules themselves permit the granting of a waiver or variance.

Upon request of a school board, the Secretary may waive class and caseload size requirements where
   a. necessary to carry out locally-established objectives;
   b. student learning will not be adversely affected;
   c. classroom control will not be compromised; and
   d. it is otherwise in the best interests of student learning.

Unless exceptional circumstances are present, the Secretary shall respond to such requests within 10 days.

If any of these rules are in conflict with a provision in an existing collective bargaining agreement, the local board must provide an explanation to the Secretary to that effect, and if appropriate, a plan to address that conflict.

2128   Effective Date

These rules, except as otherwise specified herein, shall become effective on 15 days after adoption is complete, in accordance with 3 V.S.A. §845(d).

Implementation and support by the Agency will be determined by the Secretary.

Community High School of Vermont

Reducing recidivism through education and employment

Research tells us that addressing criminogenic needs or dynamic risk factors reduces criminal thinking, builds skills, and reduces recidivism. These criminogenic targets are:

1) Criminal Attitude & Beliefs
2) Peer Associations
3) Self-Regulation and Self-management skills
4) Aggression
5) Impulsivity
6) Family
7) Vocational Skills & Employment
8) Education
9) Substance Abuse
10) Constructive Leisure Time
11) Relapse Prevention

These dynamic risk factors are factors that can be assessed, addressed, and changed with the people who we work with if we identify through the Level of Service Inventory which risk factors need to be targeted. Within most facilities and P&P offices there are the resources to target many of these dynamic factors. Targeting these factors is referred to as the Need Principle which tells us *WHAT* to target. By not targeting the proper dynamic factors we risk not being effective in changing the lives of the people we work with, not reducing recidivism, and not obtaining Corrections goal of public safety. Research tells us that to be effective in reducing criminal thinking 4-6 dynamic factors must be addressed. Responsivity Principle tells us *HOW* to target dynamic risk factors through cognitive therapy, behavioral modification, and social learning theory.

<u>Addressing Dynamic Factors Identified by the LSI-R:</u>

1) **Criminal Attitude & Beliefs**
   LSI-R Questions # 1 – 10
2) **Peer Associations**
   LSI-R Questions # 18 – 20

   Through education and involvement with CHSVT students begin to associate in a

   positive environment. Many of our courses in the community involve going out into the

   community and meeting positive community members. Being in an education

   environment involves speaking and acting in a pro-social way. Social Learning theory

   tells us that people will pick up what they see around them. If students are involved with

   positive people in positive situation they begin to pick up the language and attitudes of

   positive middle-class people. Through this model students are given the opportunity to

   learn, practice, and demonstrate new skills.

3) **Self-Regulation and Self-management skills**

4) **Aggression**
   LSI-R Question # 10
5) **Impulsivity**
   LSI-R Questions # 7, 8, 9, 10, 14, 17, 37 – 45, 51 (argument could be made that all
   questions get at impulsivity)

   Ruby Paynes work Bridges out of Poverty helps us identify the common cycle of

   someone who lives in generational poverty. Poverty is defined as "the extent to which an

   individual does without resources." The cycle shows: lack of planning skills, if you can't

   plan then you can't predict, if you can't predict then you can't identify cause and effect, if

   you can't identify cause and effect you can't identify consequences, of you can't identify

consequences you can't control your impulsivity, if there is no impulse control there is a high inclination to criminal behavior.

The Habits of Mind course and Habits of Mind "mindful mind set" assist students of CHSVT to become better planners and decision makers. The 16 Habits of Mind offer students what is often lacking in generational poverty and that is lack of planning skills.

6) **Family**
LSI-R Questions # 23 - 26
7) **Vocational Skills & Employment**
LSI-R Questions # 11 – 17

Vocational & employment skills are important for offenders to obtain if they do not posses these skills. In a very competitive job market where offenders already have marks against them it is important that skills' training is available and supported by correctional staff. "Offenders that have the lowest level of educational skills, and are therefore less employable, are also the most likely to return to prison time and time again" (Przybylski, 2008, p.38). It is important that we recognize that vocational training is an investment, and has been found to provide $5.67 in taxpayer benefit for every $1 of cost (Przybylski, 2008). The 2009 study in Washington State found a reduction in recidivism of 9.8% for facility-based vocational programs and a 4.6% reduction for community-based employment programs.

CHSVT has a class called World of Work. This course explores: employment seeking skills, resume writing, job applications, interviewing skills. It also includes assessment of job attitudes (JSAI: Job Search Attitude Inventory) and barriers (BESI: Barriers to

Employment Success Inventory). The course also explores areas in job satisfaction through structured activities in Choices, a software that is self-paced and can help people understand how they want to work and CDM (Career Decision Maker) which is a paper-based inventory that assists people in finding out what employment fits their work style. Creative Workforce Solutions (CWS) is a coalition of job developers, coaches, and supports that help offenders obtain employment when they are *ready* for work.

8) **Education**
   LSI-R Questions # 15 – 17

   Not having a high school education or high school diploma effects stability, means lowering paying jobs, fewer job rewards, and their ability to be successful. By addressing this risk factor not only can question 15 & 16 be reduced, but other risk factors can also be reduced due to more satisfactions as a productive member of society (LSI Score Guide). When we ignore (do not address) the need for education we make it more difficult for other risk areas to be addressed do to the instability of legitimate work in the community. The 2009 study in Washington State found a reduction in recidivism of 8.3% for education programs in corrections that offer basic education or postsecondary education.

   CHSVT offers many flexible ways that people under custody can obtain their high school diploma. CHSVT offers individualized graduation plans that meet the needs of the student, CHSVT, and Vermont Department of Education.

9) **Substance Abuse**
   LSI-R Questions # 37 – 45
10) **Constructive Leisure Time**

LSI-R Questions # 30 – 31
11) Relapse Prevention

References:

Aos, S., Drake, E., & Miller, M. (2009). *Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State.* Taylor & Francis Group, LLC

Przybylski, R. (2008). *What Works: Effective Recidivism Reduction and Risk-Focused Prevention Programs, A Compendium of Evidence-Based Options for Preventing New and Persistent Criminal Behavior.* RKC Group.

Devol, P., Payne, R., Smith, T. (2006) *Bridges out of Poverty, Strategies for Professionals and Communities*. Aha Process, Inc.

Below is course work that can be offered by Community High School that is directly connected to criminogenic need areas. Not every campus will always offer these courses, but they are available through the school Curriculum Framework with specific competencies and standards for course completion.

Employment Need Area:

Career Exploration: Career Exploration courses help students identify and evaluate personal goals, priorities, aptitudes, and interests with the goal of helping them make informed decisions about their careers. These courses expose students to various sources of information on career and training options and may also assist them in developing job search and employability skills.

Employability Skills: Employability Skills courses help students match their interests and aptitudes to career options with a focus on using employment information effectively, acquiring and improving job-seeking and interview skills, composing job applications and resumes, and learning the skills needed to remain in and advance within the workplace. Course content may also include consumer education and personal money management topics.

Diversified Occupations: Diversified Occupations courses help students enter the workforce through career exploration, job search and application, and the development of positive work attitudes and work-related skill. These courses typically cover such topics as career planning and selection, money management, communication skills, interpersonal business relationships and behaviors, and personal responsibility. Employment may be a required component of these courses, or students may be required to enroll concurrently in a work experience course.

Financial Need Area:

Consumer Economics/Personal Finance: Consumer Economics/Personal Finance courses provide students with an understanding of the concepts and principles involved in

managing one's personal finances. Topics may include savings and investing, credit, insurance, taxes and social security, spending patterns and budget planning, contracts, and consumer protection. These courses may also provide an overview of the American economy.

Informal Mathematics: Informal Mathematics courses emphasize the teaching of mathematics as problem solving, communication, and reasoning, and highlight the connections among mathematical topics and between mathematics and other disciplines. These courses approach the teaching of general math, pre-algebra, and pre-geometry topics by applying numbers, and algebraic and geometric concepts and relationships to real world problems.

General Math: General Math courses reinforce and expand students' foundational math skills, such as arithmetic operations using rational numbers; area, perimeter, and volume of geometric figures, congruence and similarity, angle relationships, the Pythagorean theorem, the rectangular coordinate system, sets and logic, ratio and proportion, estimation, formulas, solving and graphing simple equations and inequalities.

Education Need Area:

Study Skills: Study Skills courses prepare students for success in high school and/or for postsecondary education. Course topics may vary according to the students involved, but typically include reading improvement skills, such as scanning, note-taking, and outlining; library and research skills; listening and note-taking; vocabulary skills; and test-taking skills. The courses may also include exercises designed to generate organized, logical thinking and writing.

School Orientation (Making Academic Goals Introducing Community High School, MAGIC): School Orientation courses provide students with an introduction to the culture of their school so that they understand staff expectations and the school's structure and conventions. These courses may vary widely according to the philosophy, aims, and methods of each school.

Personal Characteristics & Orientation, Leisure, and Family Need Area:

Food and Nutrition: Food and Nutrition courses provide students with an understanding of food's role in society, instruction in how to plan and prepare meals, experience in the proper use of equipment and utensils, and background on the nutritional needs and requirements for healthy living. Some classes place a heavier emphasis on the nutritional components of a balanced diet, while others concentrate on specific types of food preparation. Although these courses may present career opportunities in the food service industry, their emphasis is not career-related.

Child Development/Parenting: Child Development/Parenting courses provide students with knowledge about the physical, mental, emotional, and social growth and development of children from conception to pre-school age. In addition, these courses help students discover how parents should respond to the various stages of childhood. Course content typically includes topics such as prenatal and birth processes; responsibilities and difficulties of parenthood; fundamentals of children's emotional and physical development; and the appropriate care of infants, toddlers, and young children.

Life Skills: Life Skills courses provide students with information about a wide range of subjects to assist them in becoming wise consumers and productive adults. These courses often emphasize such topics as goal-setting, decision-making, and setting priorities; money and time management; relationships; and the development of the self. Practical exercises regarding selecting and furnishing houses, meeting transportation needs, preparing food, selecting clothing, and building a wardrobe are often integral to these classes. In addition, specific topics such as insurance, taxation, and consumer protection may also be covered.

Self-Management: Self-Management courses introduce students to the skills and strategies helpful in becoming more focused, productive individuals. These courses typically emphasize goal-setting; decision making; managing time, energy, and stress;

and identifying alternatives and coping strategies. They may also allow students to explore various career and lifestyle choices, awareness, and preparation for the responsibilities of a family member and wage earner.

Personal Development: Similar to Family Living courses, but more focused on the individual, Personal Development courses emphasize strengthening self-esteem, recognizing and resisting negative peer pressure, and developing coping skills for dealing with changes within one's self and within others. These courses may also have a substance-abuse prevention component.

Community Living: Community living courses place a special emphasis on the student's relationship to the surrounding community. Instruction varies with the students and their needs; however, these courses provide the skills necessary for independent functioning within the surrounding environment. Course topics may also include available community resources and how to access them, emergency skills, and independent living strategies.

Social Development Instruction: Social Development Instruction courses teach students the social skills needed for independent functioning within the community. Topics may include self-control, self-expression, obeying rules, decision-making, appropriate situational behavior, interacting with others, and maintaining relationships. Students may develop independence, self-confidence, and self-reliance.

Values Clarification: Values Clarification courses enable students to explore individual and societal actions and implications in order to help them develop personal values and make decisions about their lives. Examples of discussion topics include philosophy and religion, world resource allocation, genetic engineering, environmental issues, and death-related issues (euthanasia, suicide, and abortion).

Family Living: Family Living courses emphasize building and maintaining healthy interpersonal relationships among family members and other members of society. These

courses often emphasize (but are not limited to) topics such as social/dating practices, human sexuality and reproduction, marriage preparation, parenthood and the function of the family unit, and the various stages of life. They may also cover topics related to individual self-development, career development, and personal.

INTEGRATED REENTRY and EMPLOYMENT STRATEGIES

Reducing Recidivism and Promoting Job Readiness

INTEGRATED REENTRY and EMPLOYMENT STRATEGIES:

Reducing Recidivism and Promoting Job Readiness

JUSTICE ★ CENTER
THE COUNCIL OF STATE GOVERNMENTS

About the Annie E. Casey Foundation: Founded in 1948, the primary mission of the Annie E. Casey Foundation (AECF) is to foster public policies, human-service reforms, and community supports that more effectively meet the needs of today's vulnerable children and families. In pursuit of this goal, the Foundation makes grants that help states, cities, and neighborhoods fashion more innovative, cost-effective responses to these needs. Additional information is available at aecf.org.

About the Bureau of Justice Assistance: The Bureau of Justice Assistance (BJA), Office of Justice Programs, U.S. Department of Justice, supports law enforcement, courts, corrections, treatment, victim services, technology, and prevention initiatives that strengthen the nation's criminal justice system. BJA provides leadership, services, and funding to America's communities by emphasizing local control; building relationships in the field; developing collaborations and partnerships; promoting capacity building through planning; streamlining the administration of grants; increasing training and technical assistance; creating accountability of projects; encouraging innovation; and ultimately communicating the value of justice efforts to decision makers at every level. Visit bja.gov for more information.

About the Department of Labor: The U.S. Department of Labor is charged with promoting the best interests of wage earners, job seekers, and retirees of the United States. The Department does this by improving working conditions, advancing opportunities for profitable employment, protecting work-related benefits and rights, helping employers find workers, strengthening free collective bargaining, and tracking changes in employment, prices, and other national economic measurements. To carry out this mission the Department administers federal labor laws that deal with employment including hourly wage and overtime pay, workers' right to safe working conditions, employment discrimination, and unemployment insurance. The mission of the Employment and Training Administration, as part of the U.S. Department of Labor, is to contribute to the more efficient functioning of the U.S. labor market by providing high-quality job training, employment, labor market information, and income maintenance services primarily through state and local workforce development systems. For more information, see dol.gov.

About the CSG Justice Center: The Council of State Governments Justice Center (CSG Justice Center) is a national nonprofit organization that serves policymakers at the local, state, and federal levels from all branches of government. It provides practical, nonpartisan advice and evidence-based, consensus-driven strategies to increase public safety and strengthen communities. For more about the CSG Justice Center, see csgjusticecenter.org.

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CONTENTS

PREFACE

THIS WHITE PAPER is written for policymakers and practitioners engaged in the corrections and workforce development fields who recognize the need for the two systems to collaborate more closely to improve public safety and employment outcomes for people who have been incarcerated or are on probation or parole. It promotes close collaborations with reentry service providers and provides guidance on prioritizing scarce resources to more effectively reduce rates of reincarceration and joblessness. The paper also outlines principles that should drive both supervision and service decisions—decisions that can help ensure that front-line personnel's efforts are having the greatest positive effect.

Employment providers are already serving large numbers of individuals released from correctional facilities or who are required to find jobs as conditions of their probation or parole. Yet the corrections, reentry, and workforce development fields have lacked an integrated tool that draws on the best thinking about reducing recidivism and improving job placement and retention to guide correctional supervision and the provision of community-based services.

To address this gap, this white paper presents a tool that draws on evidence-based criminal justice practices and promising strategies for connecting hard-to-employ people to work. It calls for program design and practices to be tailored for adults with criminal histories based on their levels of risk for future criminal activity.

Some people question why limited resources should be focused on employing men and women who have been in prison, jail, or are on probation or parole when unemployment rates remain high across the nation for law-abiding individuals. With mounting research, it is clear there are significant benefits for our communities in working with this population. Successful reintegration into the workforce can make neighborhoods and families safer and more stable. Linking individuals who have been involved with the corrections system to jobs and helping them succeed can reduce the staggering costs to taxpayers for reincarceration and increases contributions to the tax base for community services. If releasees and supervisees are working, their time is being spent in constructive ways and they are then less likely to engage in crime and disorder in their neighborhoods. They also are more likely to develop prosocial relationships when their time is structured with work and they are able to help care and provide for their families.

Employment is a point at which the goals of the criminal justice, workforce development, family services, health and human services, and social services systems can converge. With budget cuts to all these systems, resources must be focused on the right individuals (i.e., people who would benefit the most from interventions), using the right strategies that are delivered at the right time. Improved outcomes for individuals returning to their communities, for their families, and for each system's investments can be realized by better coordinating the correctional supervision, treatment, supports, and other services being delivered at that point of intersection to individuals who have been incarcerated or are on probation or parole. This white paper is meant to facilitate discussions across systems by introducing a tool that can help put such a framework for coordination in place.

ACKNOWLEDGMENTS

THIS PAPER is the result of a collaborative effort involving experts on reentry and recidivism reduction, workforce development and labor, and social policy research. It draws on an extensive review of the literature and related research, observations of programs in the field, feedback from national experts, several multidisciplinary forums and advisory group discussions, and a rigorous review process. Although the individuals involved in every aspect of the project are too numerous to thank, the authors hope they see their efforts reflected in this paper.

This project was built on the strong foundational work done by CSG Justice Center Director Michael Thompson and Center for Employment Opportunities Chief Executive Officer and Executive Director Mindy Tarlow for the *Reentry Employment Services Matrix*, as well as the work conducted by then-Public/Private Venture Senior Vice President of Program Effectiveness Sheila Maguire on *Supporting Second Chances: Employment Strategies for Reentry Programs.* They have all provided much-appreciated guidance and tireless support for this effort. Dr. Harry Holzer, Professor at the Georgetown Public Policy Institute, also helped the team navigate the employment research and think through difficult issues. Dr. Ed Latessa, too, generously gave his time and expertise in untangling the relationship between recidivism-reduction strategies and employment.

Special thanks also is due to John Padilla, Senior Program Associate at the Annie E. Casey Foundation; Ruby Qazilbash, Associate Deputy Director at the Bureau of Justice Assistance, U.S. Department of Justice; Gary Dennis, Ph.D., Senior Policy Advisor for Corrections at the Bureau of Justice Assistance, U.S. Department of Justice; and Thurston Bryant, Policy Advisor at the Bureau of Justice Assistance, U.S. Department of Justice. This project would not have been possible without their leadership. Amy Solomon, Senior Advisor at the Office of Justice Programs, U.S. Department of Justice also provided unflagging support and valuable feedback while making sure critical voices were always heard. Jacqui Freeman, Unit Chief for the Reintegration of Ex-Offenders (RExO), Division of Youth Services, U.S. Department of Labor, shared her expertise and experience on both content and outreach to ensure the white paper complemented the goals of the Federal Interagency Reentry Council.

A group of expert advisors gave generously of their time and expertise—providing insights and resources that were truly invaluable—and they deserve tremendous thanks for all their work:[*]

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[*] All titles reflect the positions individuals held at the time of their project involvement unless otherwise indicated.

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[*] At the time of the project, Richard Greenwald was a Senior Fellow at the Manhattan Institute's Center for Civic Innovation, NY.
[†] At the time of the project, Eric Seleznow was State Policy Director at National Skills Coalition, DC.

INTRODUCTION

THE VAST MAJORITY of individuals who are in U.S. jails and prisons will eventually return to the community.[1] Criminal justice policymakers and practitioners everywhere have made it a priority to ensure these individuals, returning in large numbers each year, do not commit new crimes following their release.[*] As part of these efforts, state and local government officials have focused on the need for people released from prison and jail to have jobs, seeing employment as critical to successful reentry. Indeed, incarcerated individuals that have been asked about their post-release plans typically say that getting a job is crucial to their ability to stay crime free.[2] Workforce development agencies and employment service providers also recognize that people with criminal records are an important subgroup of their clientele. Many employment service providers already see large numbers of unemployed individuals with criminal records come through their doors who face a distinct set of barriers to joining the workforce because of their criminal history, in addition to a wide range of other needs.[†]

This white paper examines proven criminal justice approaches for reducing recidivism and promising practices from the employment field for improving job readiness.[‡] It provides a new integrated tool that can be used as a starting point for collaborations among corrections, reentry, and employment policymakers and practitioners to reduce the likelihood of reoffending and improve workforce preparedness for individuals returning from correctional facilities or who are on probation or parole. The paper provides guidance on how to make the best use of scarce resources by implementing assessment-based approaches that respond to individuals' risk of future criminal behavior (and other factors associated with reincarceration) and their needs for pre-release and post-release services in order to produce better public safety, reentry, and employment outcomes for the shared population.[§]

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[*] Approximately nine million people return to the community from jail annually. Amy L. Solomon, et al., *Life After Lockup: Improving Reentry from Jail to the Community* (Washington: Urban Institute, May 2008), available at ncjrs.gov/pdffiles1/bja/220095.pdf; Allen Beck, Jail Reentry Roundtable presentation, Bureau of Justice Statistics, U.S. Department of Justice, June 2006, available at urban.org/projects/reentry-roundtable/upload/beck.PPT. Nearly 650,000 individuals or more return from state prisons—ranging from a high of 692,303 in 2006 to 649,677 in 2010. Paul Guerino, Paige M. Harrison, and William J. Sabol, *Prisoners in 2010* (Washington: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, December 2011). As of the end of 2007, 1 in 31 U.S. adults were under some form of correctional control (i.e., prison, jail, probation, or parole). *One in 31: The Long Reach of American Corrections* (Washington: Pew Center on the States, The Pew Charitable Trusts, March 2009).

[†] Some studies estimate there are more than 65 million individuals with criminal records in the workforce, searching for work, or of working age. Maurice Emsellem and Michelle N. Rodriguez, *65 Million "Need Not Apply": The Case for Reforming Criminal Background Checks for Employment* (New York: National Employment Law Project, 2011). Furthermore, some estimates suggest that one in every 33 working-age adults has been incarcerated in prison. John Schmitt and Kris Warner, *Ex-offenders and the Labor Market* (Washington: Center for Economic and Policy Research, 2010).

[‡] Recidivism is the repetition of criminal or delinquent behavior, most often measured as a new arrest, conviction, or return to prison and/or jail for the commission of a new crime or for the violation of conditions of supervision. Marshall Clement, Matthew Schwarzfeld, and Michael Thompson, *The National Summit on Justice Reinvestment and Public Safety: Addressing Recidivism, Crime, and Corrections Spending* (New York: Council of State Governments Justice Center, 2011). For the purposes of this paper, recidivism refers to individuals' return to prison or jail for any reason.

[§] For the purposes of brevity in this paper, the references made to individuals' risk of future criminal behavior, reoffending, or criminal activity also include their risk of violating the terms of their probation and parole that can lead to revocation. The exception is that in discussions of the paper's integrated resource-allocation and service-matching tool, and the Risk-Need-Responsivity recidivism-reduction principles on which the tool is based, the primary focus is on reoffending.

The Relationship between Employment and Recidivism

Employment can make a strong contribution to recidivism-reduction efforts because it refocuses individuals' time and efforts on prosocial activities,* making them less likely to engage in riskier behaviors and to associate with people who do. Having a job also enables individuals to contribute income to their families, which can generate more personal support, stronger positive relationships, enhanced self-esteem, and improved mental health.[3] For these reasons, employment is often seen as a gateway to becoming and remaining a law-abiding and contributing member of a community. Employment also has important societal benefits, including reduced strain on social service resources, contributions to the tax base, and safer, more stable communities.

Although practical experience suggests that holding a job plays an important role in reducing recidivism, research on the link between employment and reductions in reoffending has revealed a complicated relationship. There is some evidence that people released from prison and jail that hold jobs in the community are less likely to recidivate, especially when earnings are above minimum wage.[5] Research also shows that job stability over an extended period of time can reduce the likelihood that an individual will reoffend.[6] However, research does not support the proposition that simply placing an individual in a job is a silver bullet for reducing criminal behaviors. All told, there are few studies that demonstrate a direct causal relationship between current employment service practices and recidivism rates.[7]

What various studies do suggest is that to reduce criminal behaviors and recidivism, employment service providers and corrections professionals must address individuals' antisocial attitudes and beliefs associated with crime, many of which also impact an individual's ability to succeed in the workplace.[8] In order for employment service providers to help lower individuals' risk of recidivism, individuals must be motivated to change their behavior (this is especially true of young males).[9] Their decision to live more prosocial lifestyles is integral to the success of employment and other programs. This finding is consistent with research that suggests older individuals (who are already on a trajectory toward desistance from crime) typically benefit more from employment programs than less motivated individuals.[10]

MAKING COMMUNITIES SAFER AND MORE STABLE

As the reentry movement has advanced over the last decade, there has been increasing awareness that helping individuals avoid reoffending can increase their success in reclaiming their lives and can improve neighborhoods and communities. This is particularly true for neighborhoods that typically receive a disproportionate number of individuals returning from incarceration, and which also tend to lack social service resources.† Research confirms that these vulnerable areas already face high gang activity, poverty, and unemployment.[4] This high unemployment—especially among those returning from incarceration—contributes to the destabilizing impact on communities and families.

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* Prosocial activities are those that reflect individuals' thinking about the welfare of others and/or the benefit to the community. In the context of this paper, they are chiefly related to law-abiding behaviors and positive social relationships.

† For instance, a data analysis project in Phoenix, Arizona, revealed one neighborhood that represented 1 percent of the state's population, but was home to 6.5 percent of the state's prison population. For information on how Arizona addressed its vulnerable neighborhoods and made more effective use of its public safety dollars, see *Reducing Crime and Generating Savings: Options for Arizona Policymakers* (New York: CSG Justice Center, February 2008), available at csgjusticecenter.org/jr/arizona/publications/reducing-crime-and-generating-savings-options-for-arizona-policymakers.

Emerging research does reveal that some employment-focused reentry programs can reduce criminal behaviors by effectively incorporating activities and services that address "criminogenic risks and needs"—that is, individuals' characteristics that have been linked to the likelihood of reincarceration, such as substance abuse and antisocial peers and attitudes. These findings are consistent with the Risk-Need-Responsivity (RNR) principles detailed in Section I of this paper, which are used by growing numbers of corrections and reentry practitioners to reduce recidivism. In short, these principles guide practitioners and system administrators on how to use objective assessment tools to identify and serve individuals who are at a higher risk of committing a future crime.* They then help to direct needed services and supervision resources to these higher-risk individuals in ways that can achieve the greatest reductions in recidivism.

> ## LIMITATIONS ON RESEARCH REGARDING EMPLOYMENT AND RECIDIVISM
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> There are several reasons why there is relatively limited evidence on whether employment-focused reentry programs reduce recidivism. Many programs simply focus on connecting individuals with employment, and of those programs that do address individuals' likelihood of recidivism, very few have been evaluated by experimental research that adequately considers important factors such as the participant's motivation to change and attitudes about work and crime.[11] When experimental evaluations have been conducted, they tend to focus on outcomes for the whole program instead of the effort's distinct components (such as coordinated case management, job-skills training, interview and resume preparation, and others). As a result, it is difficult to determine which specific practices are most effective.

Applying Workforce Development Principles to Individuals with Criminal Histories

Just as advances in the reentry field and greater recognition and adherence to the RNR principles have helped curb recidivism rates,[12] the workforce development and labor field has made significant strides in the design of strategies that can improve employability. Following passage of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), workforce development practitioners stepped up efforts to help hard-to-employ individuals (e.g., individuals with little work experience, low educational attainment, or reliance on government support programs) succeed through tailored programs, practices,

> ## SCOPE OF THE POPULATION ADDRESSED BY THIS PAPER
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> This white paper focuses primarily on adults being released from prison or jail, probationers, and parolees who lack employment. For the purposes of this paper, the term "individuals with criminal histories" is sometimes used as shorthand to describe this population. Although this paper recognizes the valuable contributions of behind-the-bars programming, the recommended approaches primarily target the period of transition from correctional facilities to the community, and the days and months following release and/or at the start of community supervision. This focus also does not negate the need for long-term, ongoing services for these individuals, particularly as their circumstances change.

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* Most risk-assessment instruments go beyond determining risks for committing a new crime and include the risks associated with technical violations of probation or parole that can lead to reincarceration (recidivism measures). This is particularly important for this population given that conditions of correctional supervision and release typically require individuals to seek employment and repay court-ordered fees and fines. (However, few risk tools determine whether the individual's risks are specifically related to technical violations versus the commission of a new crime.) There are also specialized risk-assessment tools that have been developed to determine specific areas of risk, such as violent behavior and sexual offenses. These risk tools may be used in addition to assessing the risk of reincarceration, but no risk tool exists that can predict the behavior of a specific individual.

and strategies. These approaches have included welfare-to-work and supportive employment programs, among many others.

On the heels of the enactment of PRWORA, federal, state, and local policymakers and employment service providers continued to explore strategies to promote growth in the workforce field and better engage business leaders. To this end, the Workforce Investment Act of 1998 (WIA) was passed to tailor the efforts of the public workforce system to employers' needs. WIA was also designed to provide Americans with the training, tools, and support they need to start and advance their careers. It has supported community "One-Stop Career Centers"* across the nation that often serve as the engine for the workforce development field by helping to provide the majority of employment-related services in many jurisdictions.

People with criminal histories are often some of the most difficult to place in jobs.[13] Because millions of adults in the nation have a history of involvement with the criminal justice system, they make up a considerable portion of the hard-to-employ population that is increasingly being seen by workforce development practitioners. Researchers have found that, like other hard-to-employ individuals, people who have been incarcerated have significant educational deficits. Only about half have earned a high school degree or equivalent and surveys confirm that "more than half were previously fired from a

HARD-TO-EMPLOY INDIVIDUALS WITH CRIMINAL HISTORIES: A SUPPLY-AND-DEMAND MODEL

Some experts frame the employment issue for individuals with criminal histories in an economic supply-and-demand context. "Supply-side barriers" include this population's characteristics that make them difficult to connect to long-term legitimate work: a tendency to have more antisocial thinking and a greater likelihood of behavioral health disorders, unstable housing, and other complex problems.[14] Additionally, many of these individuals may lack the skills and professional attributes that employers seek.

Employers also may not create sufficient "demand" for employees with criminal histories because business owners and agency leaders are less likely to be interested in hiring from this population for two sets of reasons: those related to personal characteristics and those related to criminal history status.[15] Some employers concerned about liability for employees' actions also may consider a criminal record as a proxy for lack of integrity.[16] A survey of employers found that only about 40 percent were willing to consider filling their most recent job vacancy with someone who has recently returned to the community following incarceration.[17] Furthermore, as of 2010, an estimated 92 percent of all large employers conducted criminal background checks as part of the application process for some or all job candidates, illustrating the extent to which employers are concerned with an applicant's criminal record.[18]

On April 25, 2012, the Equal Employment Opportunity Commission (EEOC) updated its guidance on the use of criminal background checks for employment under Title VII of the Civil Rights Act of 1964, clarifying that blanket exclusions for individuals with criminal records violate Title VII because of its disparate racial impact. The guidance urges employers to consider the "nature of the crime, the time elapsed, and the nature of the job" in hiring decisions. (See eeoc.gov/eeoc/newsroom/release/4-25-12.cfm.)†

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* One-Stop Career Centers refer to the agencies funded through WIA to provide workforce development and employment services. Although these workforce development centers are colloquially referred to as "one-stops," the Department of Labor has begun using the term "American Job Centers" to describe both web-based and brick-and-mortar career and workforce resources, and the term One-Stop Career Center will only refer to physical resource facilities. See sidebar on page 22.

† For more information on what the EEOC's updated enforcement guidance means for employers' use of arrest and conviction records, see the National Reentry Resource Center announcement at csgjusticecenter.org/reentry/announcements/eeoc-updates-policy-on-criminal-background-checks.

job, and many depended on illegal income prior to incarceration."[19] Research shows that on average, incarceration triggers a 19-percent decrease in the number of weeks worked annually, and a 40-percent reduction in yearly earnings.[20] These monetary losses should raise deep concerns given that lower wages are associated with higher rates of criminal activity.[21]

Individuals with criminal records also face a number of legal barriers to employment [which organizations such as the American Bar Association (ABA) have described as one of many "collateral consequences" of a criminal conviction]. Many states have a confusing patchwork of restrictions that can vary in employer discretion, duration of their application, and in their reach.[22] According to an ongoing ABA review of state policies, there are many barriers for individuals with criminal records (an estimated 40,000 statutes and regulations),* and a projected 50 percent of those collateral consequences are job related.[23] For example, some authorities will not license people with felony (or even non-felony) records for certain professions, such as barbers, truck drivers, and health care providers. In some states these policies can have tremendous consequences. In Florida alone, statutory regulations and limitations targeting people with criminal records affect 40 percent of jobs.[24] Although some restrictions are certainly required, such as those related to individuals who work with children, others appear to be less about safety and more about prolonging the punishment of individuals with criminal histories.[25] Many legal aid providers offer low-income individuals with a criminal record free legal assistance in navigating these complicated barriers and securing professional and other licenses. Accordingly, these providers can be an important part of any program that seeks to increase employment opportunities for this population.

Although workforce agency staff are dedicated to helping hard-to-employ people overcome barriers to employment and find work, their services and programs do not always specifically focus on people with criminal histories and have sometimes yielded mixed results for this population. Section II of this paper provides an overview of the strategies that workforce development and labor professionals use for hard-to-employ adults that can be applied to individuals with criminal histories, with particular attention to "job readiness."† To improve outcomes for this population, it is important that best practices from the workforce development field be tailored to the reentry population in ways that attend to individual levels of job readiness *and* criminogenic risk factors.

Given the many employment challenges for this criminal justice population, policymakers and workforce service providers may well be wondering why they should receive so much attention for services when there are significant obstacles for individuals who have never broken the law and who are looking for work. The reentry population, admittedly, may include large numbers of individuals

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* At the time of publication, the policies of 22 states have been comprehensively reviewed by the American Bar Association and are available in an interactive, state-by-state compilation of collateral consequences. For more information on this project as more states are reviewed, please see abacollateralconsequences.org. Additional information on the collateral consequences of having a criminal record imposed by federal laws and regulations can be found in "Internal Exile: Collateral Consequences of Conviction in Federal Laws and Regulations," published by the American Bar Association in 2009, at pdsdc.org/resources/publication/collateral%20consequences%20of%20conviction%20in%20federal%20laws%20and%20regulations.pdf.

† Job readiness is a determination based on personal characteristics that make an individual more or less competitive in the labor market. These characteristics generally include personal and family challenges, education and skill deficits, and other needs that may impair individuals' ability to attain and retain employment. For more on job readiness and other key employment terms see the definitions on page 18.

who are more difficult to employ than individuals without a criminal history. As the preface to this paper suggests, the answer is simply that

- individuals with criminal histories are already being seen by employment service providers in large numbers;

- like any diverse population, tailored approaches could achieve better results—in this case, both improved safety and employment goals;

- employment can have a stabilizing effect on families and vulnerable neighborhoods in the longer term; and

- employment programs that focus on recidivism reduction will ultimately lead to better labor market outcomes, as incarceration has been shown to reduce an individual's employment prospects and upward economic mobility over the long run.[26]

With scarce resources, workforce service providers need to know that by focusing on the right people with criminal records, at the right time, and with the right interventions, they can help reduce the chance that individuals will reoffend and improve the likelihood that individuals will successfully connect to the workforce.

The Need for an Integrated Tool

Policymakers and practitioners in corrections, reentry, and workforce development are all struggling to make the most effective use of their limited resources. Individuals returning from prison, jail, or beginning community supervision have varied types and levels of employment needs, which can be as intensive as immediate, subsidized employment along with a constellation of support services. With the enormous number of individuals returning from prisons and jails or beginning community supervision, state and local government officials and service providers need a common framework to think about which individuals with criminal histories should be prioritized for the most intensive programming slots that require considerable resources, and which individuals will be successful with services that are less resource intensive. It is critical to make the greatest investments in the individuals that will benefit most from recidivism-reduction strategies and employment services, particularly as jurisdictions struggle with unrelenting fiscal pressures.

Although there is broad acceptance that community-based employment service professionals are already serving people with criminal histories in large numbers, there has not been a framework or tool for linking the science of reducing risk for criminal activity with the promising strategies for improving outcomes for hard-to-employ populations. And while both corrections and employment personnel have long recognized the need to coordinate efforts to increase successes among their shared population, working through the practical, cross-systems issues in order to integrate responses can be challenging. Experts, researchers, and practitioners from both fields have made it clear that there is a need for easy-to-follow guidance for administrators and service providers on making evidence-based programming, supervision, and service decisions. This white paper is intended to help fill that gap.

With support from the U.S. Justice Department's Bureau of Justice Assistance and the Annie E. Casey Foundation, and with guidance from the U.S. Department of Labor, the CSG Justice Center worked in

partnership with Public/Private Ventures[*] and the Center for Employment Opportunities to develop a tool to help corrections and workforce development professionals focus their resources on positioning individuals with criminal histories to succeed in the workforce and avoid reincarceration. The challenge is that strategies from each field cannot simply be added together without thought as to how they may affect one another. This white paper is meant to prompt readers to think about how existing strategies can be combined in effective ways and how new and creative strategies inspired by the tool can be tested.

THIS PAPER IS DIVIDED INTO THREE PARTS:

I. What works to reduce recidivism: risk/need principles that employment professionals can use to improve outcomes for individuals who have been involved in the corrections system

II. Proven and promising practices for improving outcomes for hard-to-employ individuals, including adults with criminal records

III. The resource-allocation and service-matching tool: an integrated approach to improving reentry and employment outcomes for individuals released from prison or jail, or who are beginning community supervision

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Section I provides an overview of the principles that help guide corrections practitioners and administrators as they work to reduce individuals' likelihood of reincarceration and promote successful reentry. Similarly, **Section II** provides an overview of promising practices in the workforce development field. It provides a summary of relevant workforce strategies and examines some of the overlap with corrections and reentry principles. These sections help establish a foundation for productive discussions on improving outcomes for the corrections and workforce development systems' shared population.

The resource-allocation and service-matching tool that is featured in **Section III** represents a significant shift in how state and local governments typically address recidivism and job-readiness issues. By integrating the research-driven principles from the criminal justice and employment fields, it encourages collaborations through better communications and a common vocabulary, and helps identify the individuals that would benefit most from integrated recidivism-reduction interventions and employment-related services.

Although this paper sets out integrated responses that require resources and collaborative partnerships that may not be readily available in many jurisdictions, it can and should spark creative problem solving about how to align existing resources with priority initiatives and to pool capacity in innovative ways. It can also help identify gaps and areas that can be the focus of resource development or expansion as conditions in a jurisdiction permit.

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[*] After nearly 35 years, Public/Private Ventures (P/PV) has ceased operations. Their involvement and research prior to the July 2012 closing played a key role in the development of this white paper. P/PV documents, including their research review of employment services for the hard to employ "Supporting Second Chances: Employment Strategies for Reentry Programs," are hosted by the Foundation Center's PubHub, accessible at issuelab.org/resource/supporting_second_chances_employment_strategies_for_reentry_programs.

I. WHAT WORKS TO REDUCE RECIDIVISM:
Principles for improving outcomes among unemployed individuals with corrections system-involvement

BEFORE DISCUSSING PROMISING STRATEGIES for connecting individuals with criminal histories to jobs, it is important to understand their needs that are associated with criminal behaviors and what research reveals about how to stop the cycle of reoffending and reincarceration. Just as the workforce development and labor field has been working to find effective approaches to achieve employment goals, criminal justice professionals have tested and researched how to realize public safety and reentry goals. It is critical that there be a common understanding between these systems of each other's evidence-driven approaches in order for collaborative efforts to succeed in reducing recidivism while improving employment outcomes for individuals that have been incarcerated or are on community supervision.

Decades of experience and research have led corrections professionals to develop a set of guiding principles that, when implemented correctly, can help reduce reoffending and violations of probation and parole conditions (recidivism measures). These Risk-Need-Responsivity (RNR) principles help policymakers, administrators, and practitioners determine how to allocate resources, deliver services, and place the right people into the right interventions in order to have the greatest impact on public safety and recidivism.

A vast amount of research has been conducted on the effectiveness of RNR principles in a diverse range of settings (e.g., jails, prisons, probation, and parole). These principles have been tested and evaluated through randomized control trials and quasi-experimental design studies, as well as through meta-analyses. This body of research decisively indicates that proper implementation of the RNR principles can reduce the risk of recidivism.[27] These principles have increasingly been accepted by criminal justice professionals.

Workforce and labor professionals may feel the RNR principles resonate on a practical level.

KEY TERMS AND DEFINITIONS USED BY CORRECTIONS PROFESSIONALS

Criminogenic Risk (Risk): The likelihood that an individual will engage in new criminal activity. In this context, risk does not refer to the seriousness of a crime that a person may commit in the future. Instead, standard assessments generally provide information simply on the likelihood that a person will reoffend.[*]

Criminogenic Needs (Needs): The characteristics (such as antisocial attitudes, beliefs, and thinking patterns) or circumstances (such as a person's friends or family dynamics) that research has shown are associated with criminal behavior, but which a person can change.[†]

Risk/Needs Assessment: A comprehensive examination and evaluation of both dynamic (changeable) and static (historical and/or demographic) criminogenic factors that predict risk of recidivism. Results can be used to guide decisions about services, placements, supervision, and sentencing in some cases.

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[*] See footnote on page 3 regarding how assessment instruments also often address technical violations, and how more specialized tools examine the likelihood of violence or the commission of sexual offenses.

[†] Although a person may have many needs, not all of them are associated with risk of recidivism. For example, a person's health condition or lack of stable housing can represent important needs, but research has not linked them to the likelihood of engaging in criminal behavior.

In some fundamental ways, the RNR principles resemble the approach that workforce development practitioners and American Job Centers (formerly referred to as One-Stop Career Centers), in particular, use with their clients in triaging resources. The RNR principles emphasize the importance of using risk/needs assessments to understand an individual's distinct characteristics, skills, and problems, and then using these assessment findings to identify the appropriate levels of supervision, services, and treatment.

Matching individuals to the most effective combination of services and corrections supervision is dependent on trained personnel's use of reliable, validated screening and assessment tools. These tools can help identify individuals' risks and needs associated with future criminal activity ("criminogenic risks and needs"). As discussed more fully below, assessment tools are also used to identify individuals' challenges that, if unaddressed, can make it difficult for them to benefit from treatments and interventions. Many corrections agencies use assessment instruments to determine both placement and programming decisions for individuals within a facility based on their risks and needs.[*] The information can also be used to determine supervision levels for adults on probation and parole. Finally, applying the RNR principles can guide decisions on reentry plans and referrals to services that draw on the resources of multiple systems, such as substance abuse and employment programs.[†]

A basic understanding of the RNR principles and what information is collected by corrections' risk/needs assessment instruments can help workforce and labor service providers decide how to

- add value to their work through formal partnerships;

- use risk/needs information (when appropriate) to prioritize their own resources;

- work with other reentry providers to address needs related to job readiness;

- help with service matching; and

- support employment professionals' efforts to keep clients out of the criminal justice system, given the significant negative impacts that reincarceration has on individuals' future employability and their earnings prospects.[28]

Detailed below are the core components of RNR and how adherence to those principles helps reduce recidivism

The Three Components of the RNR Principles

1. Risk Principle: Match the intensity of individuals' interventions to their levels of risk for criminal activity.

Research shows that prioritizing supervision and services for individuals at moderate or higher risk of committing a future crime can lead to a significant reduction in recidivism among this group. Conversely, intensive interventions for individuals who are at a low risk of recidivism may actually be harmful and

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[*] In both corrections facilities and in the community, corrections professionals typically use assessment instruments to determine if individuals fall within the categories of "low, medium, or high risk." Jurisdictions employ different assessment tools, and also use different cut-off scores to distinguish among the risk groups. Regardless of how these groups are defined, it is important that the higher risk groups—the priority groups—are truly at a significantly greater risk of recidivism.

[†] Most corrections and criminal justice agencies use, or have access to, risk-assessment tools and scores. Agencies may be able to share this information with service providers (contingent on appropriate sharing protocols and compliance with privacy mandates) to help achieve recidivism-reduction goals. If a local corrections partner does not use risk assessments or cannot provide this information, workforce agencies should not necessarily purchase these costly tools or expend resources on training staff in their use. Instead, they should initiate conversations with their criminal justice partners on how these tools can be acquired and implemented, and how the resulting relevant information can be shared.

contribute to increasing the person's likelihood of engaging in criminal behavior.* High-intensity programming or supervision for lower-risk individuals has been shown to be an ineffective use of resources.[29]

FIGURE 1. USING RISK FACTORS TO PRIORITIZE SERVICES

Traditionally, community-based service providers have prioritized services and supports for individuals with criminal histories who volunteer or demonstrate a willingness to participate in reentry and employment programs. However, those individuals who are most at risk for committing a future crime (and for whom interventions have the greatest potential recidivism-reduction impact) may be the least willing to engage in services. Probation and parole officers also may prefer to work most with low-risk individuals who tend to be easier to supervise. Yet there is a growing awareness that programming in correctional facilities and supervision and community services for those on probation and parole should be prioritized by risk level and not by individuals' motivation.

Risk level is determined by static factors (unchanging factors or characteristics, such as the age at first offense or gender) as well as dynamic factors (factors or characteristics such as those noted below that can be changed through interventions):[30]

1. Presence of Antisocial Behavior: early and continuing involvement in a number and variety of antisocial acts in a variety of settings

2. Antisocial Personality Pattern: adventurous, pleasure-seeking, weak self-control, and restlessly aggressive

3. Antisocial Cognition: attitudes, values, beliefs, and rationalizations supportive of crime; displays of anger, resentment, and defiance; and negative attitudes toward the law and justice systems

4. Antisocial Associates: close association with criminals and relative isolation from law-abiding individuals, and positive and immediate reinforcement from peers for criminal behavior

5. Family and/or Marital: poor relationship quality with little mutual caring or respect, poor nurturance and caring for children, and few expectations that family members will avoid criminal behavior

6. School and/or Work: poor interpersonal relationships within school or work setting, and low levels of performance and satisfaction in school and/or work

7. Leisure and/or Recreation: low levels of involvement and satisfaction in noncriminal leisure pursuits

8. Substance Abuse: abuse of alcohol and/or other drugs (tobacco excluded)

Source: James Bonta and Don A. Andrews, *Risk-Need-Responsivity Model for Offender Assessment and Rehabilitation* (Ottawa: Public Safety Canada, 2007).

* Studies have shown that low-risk individuals who are placed in a close supervision-only program may be more likely to be sanctioned for a violation of the terms of their supervision, especially if placed with high-risk individuals who exhibit antisocial behavior. Some close supervision programs' reporting requirements are difficult for individuals to comply with absent adequate treatment and supports, such as for adults with mental illnesses and substance use disorders. The reporting and compliance requirements may disrupt the very activities in supervisees' lives that are most likely to reduce recidivism, such as requiring an individual to keep leaving a new job to report to probation or parole officers. Clement, Schwarzfeld, and Thompson, *The National Summit on Justice Reinvestment and Public Safety: Addressing Recidivism, Crime, and Corrections Spending.*

2. Need Principle: Target criminogenic needs—factors that contribute to the likelihood of new criminal activity.

The need principle directs that treatment and case management should prioritize the core "criminogenic needs" that can be positively impacted through services, supervision, and supports. Research indicates that the greater the number of criminogenic needs addressed through interventions, the greater impact the interventions will have on lowering the likelihood of recidivism.[31] There is also evidence that the number of treatment hours an individual receives influences the effectiveness of the intervention. Higher-risk individuals require more program hours than lower-risk individuals, and providing too many treatment hours to lower-risk individuals can have adverse effects.[32] Structuring higher-risk individuals' time in programming helps minimize exposure to antisocial influences, whereas it can interrupt the very kinds of prosocial activities (including work and family time) that qualify individuals as lower risk.

> **Example:** A program likely to reduce recidivism will use interventions designed to change antisocial thinking, increase problem-solving skills, model positive interactions and relationships, and promote recovery from addiction in the context of other reentry goals (the "needs" related to the risk factors in figure 1 on page 11). These kinds of interventions typically employ cognitive behavioral strategies. Individuals will also have noncriminogenic needs such as lack of personal identification, transportation, or clothing. Although these needs are critical, in order to reduce recidivism, the need principle stresses the importance of addressing individuals' problems that research has most closely associated with criminal activity.

3. Responsivity Principle: Account for an individual's abilities and learning styles when designing treatment interventions.[33]

The responsivity principle highlights the importance of reducing barriers to learning by addressing learning styles, reading abilities, and motivation when designing supervision and service strategies.[34] There are two types of responsivity: general and specific, which have implications at the program and individual levels. The general responsivity principle refers to the need for interventions that help individuals address criminogenic risk factors such as antisocial thinking. Research shows that social learning approaches and cognitive behavioral therapies are generally effective in meeting a range of these needs, regardless of the type of crime committed. Prosocial modeling and skills development, teaching problem-solving skills, and using more positive reinforcement than negative have all been shown to be effective and reflect this approach.[35]

Specific responsivity refers to the principle that distinct personal needs may need to be addressed in order to prepare an individual for receiving interventions that can reduce reoffending behaviors. Specific responsivity relates to the "fine-tuning" of services or interventions, such as modifying a cognitive behavioral intervention to account for a cognitive impairment associated with some mental illnesses. It also accounts for the individual's strengths, personality, learning style and capacity, motivation, cultural, ethnic, racial, and gender characteristics, as well as behavioral health needs. Abiding by the responsivity principle can help ensure that interventions are accessible and tailored to individuals in ways that can motivate and prepare them for programming.

RNR IMPLEMENTATION CHALLENGES: ASSESSMENT INSTRUMENT SELECTION AND USE

Although the RNR principles have been increasingly embraced and effectively applied in many jurisdictions across the nation, there are ongoing implementation challenges. In practice, many agencies struggle with finding and using the best screening and assessment instruments for their particular population. There are many different screening and assessment instruments within the corrections field[*]—each with its own strengths and weaknesses and ranging from informal questionnaires to scientifically validated tools for use with a particular group of people. Creating an instrument for a specific population that can be validated is an expensive and complicated process, yet tailoring an existing tool to distinct agency needs can diminish its validity.[†] Agencies may also lack trained personnel to administer the instruments and interpret the results, or may lack direction on how to best use those results to guide decisions about placement or programming in correctional facilities and supervision levels in the community. Agency policies may not align with RNR principles: For example, agency policies may encourage placing individuals into education, skills development, or other programming related to job readiness while incarcerated, but these policies may not prioritize enrolling individuals at higher risk for criminal behavior. Instead, these programs may operate under "first come, first served" policies. It can be particularly difficult to enroll the right people into the right program because higher-risk individuals may refuse participation or may be excluded if slots are filled by motivated individuals at lower risk.[‡]

Community supervision agencies experience many of the same challenges with selecting and implementing assessment tools as well as overseeing programming.[§] In addition, services that community supervision officers may think are important for individuals under their supervision may not mesh with what local service providers want to prioritize. Some probation and parole agency policies may also use the same supervision strategies for low-risk individuals that they use for high-risk individuals. For example, they may require numerous in-person check-ins at an out-of-the-way office for all supervisees. (In contrast, an increasing number of probation and parole agencies are instituting other types of monitoring for lower-risk individuals, such as kiosk check-ins, that may facilitate employment and enhance reintegration.)

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[*] See, for example, Roger H. Peters, Marla G. Bartoi, and Pattie B. Sherman, *Screening and Assessment of Co-Occurring Disorders in the Justice System* (Delmar: CMHS National GAINS Center, 2008).

[†] For more information on validating an instrument, refer to Stephen D. Gottfredson and Laura J. Moriarty, "Statistic Risk Assessment: Old Problems and New Applications," *Crime and Delinquency* 52, no.1 (2006): 178–200; Christopher Baird, *A Question of Evidence: A Critique of Risk Assessment Models Used in the Justice System: Special Report (2009)* (Madison: National Council on Crime and Delinquency, 2009); Edward J. Latessa, et al., *Creation and Validation of the Ohio Risk Assessment System Final Report* (Cincinnati: University of Cincinnati, School of Criminal Justice, Center for Criminal Justice Research, July 2009).

[‡] In some cases, for example, some lower-risk inmates will take limited substance abuse treatment slots if participation is tied to "good time" credits associated with early release. Research-driven strategies to change high-risk individuals' motivation levels may not be undertaken if slots are filled by willing lower-risk inmates.

[§] Sometimes courts will order individuals to enroll in treatment programs as a condition of probation without fully considering their risk levels/needs and appropriateness of the program.

Example: Barriers to learning and unresponsiveness to interventions can be associated with such issues as mental illness, low motivation, cognitive deficits, and poor physical health. Corrections officials and service providers need to consider addressing individuals' conditions that can interfere with service provision. Of particular note is the overlap in responsivity factors addressed by corrections professionals with the job-readiness factors that employment and reentry practitioners need to consider for job placement, retention, and advancement.

Integration of RNR Principles into the Resource-Allocation and Service-Matching Tool

Research has demonstrated that reducing recidivism requires that scarce corrections programming, treatment, and supervision resources be prioritized for people at higher risk for criminal activity (determined by the risk-factors score on a validated assessment tool).[36] The RNR principles should be integrated into any programs that serve large numbers of individuals with criminal histories—including employment programs. Application of the risk principle can help service providers and administrators triage their more expensive and intensive services and decide how to allocate other resources. Further, prioritizing by risk allows correctional supervisors to free up resources that had been devoted to managing and supervising low-risk individuals who receive unneeded services to refocus those resources where they will have greater impact. Accordingly, the resource-allocation and service-matching tool proposed in this paper will first examine individuals' levels of risk. Those at higher risk of reoffending will be given priority for supervision and services to increase their chances for safe reentry and successful employment.

SERVICES COMMONLY USED TO REDUCE THE RISK OF RECIDIVISM

The kinds of services that research has shown are most likely to reduce the risk of recidivism are those that attend to the eight core criminogenic risk factors discussed in figure 1 on page 11. These services are often found (to varying degrees) in mental health and substance abuse treatment programs, family counseling, or some halfway house and special employment efforts.

These services—whether provided in a community or correctional setting—typically embrace cognitive behavioral interventions and treatments. Cognitive behavioral interventions designed for the corrections population target individuals' thoughts, choices, and attitudes associated with criminal behavior. They help individuals recognize antisocial behaviors, develop new strategies for coping with problems, resist antisocial peer pressure, and be mindful of the perspectives and emotions of others.[37]

Cognitive behavioral interventions and treatments reflect principles of "social learning" that suggest individuals can effectively acquire attitudes, behaviors, or knowledge through observations and interactions with their peers and others around them.[38]

Thus, cognitive behavioral interventions can be delivered within classroom settings or treatment settings where providers use intensive feedback and instruction coupled with role play and rehearsal. Interventions such as motivational interviewing can be applied during case management meetings. Whether cognitive behavioral interventions are administered in pre- or post-release settings as stand-alone programs, woven into the broader program design, or used in regular interactions with the corrections populations, they are strong tools for professionals to use in reducing recidivism.

The labor and workforce development field is not only concerned with individuals with criminal histories when they are in the community unsupervised, but also has a vested interest in what services and strategies are delivered to individuals while they are in correctional facilities or on probation or parole. Institutional programs that address risk- or responsivity-related needs can be just as important as education or employment programming in preparing an individual for entering the workforce upon release. The supervision strategies applied to individuals on probation or parole can impact their ability to enroll in employment programming or hold a job. Although there is a clear mutual benefit for the corrections and employment fields to be working together, there is often a lack of understanding of how these benefits can be achieved and to what end.

Figure 2 depicts the initial action taken in the application of the resource-allocation and service-matching tool that emphasizes the need to use validated assessments to objectively determine individuals' levels of risk of criminal behavior.* It is the first step in matching people with criminal histories to employment services while reducing their risk of reoffending. These assessments can also inform supervision policies and non-employment-related service placements (such as mental health treatment) that may impact the effectiveness of employment interventions.

FIGURE 2. GROUPING INDIVIDUALS BY LIKELIHOOD OF COMMITTING A FUTURE CRIME

| Low or "Lower" Risk | ← | **Risk and Needs Assessment** with Objective, Validated Tool | → | Moderate/High or "Higher" Risk |

This assessment measures individuals' risk of reoffending and related needs, and helps inform supervision policies and non-employment referrals/program placements that address criminogenic risk and responsivity needs.

Risk/needs information should also inform the type and intensity of employment service responses, but these decisions require a second assessment that is focused on individuals' levels of job readiness (discussed in the following section). Section II reviews the goals of employment-related services and details the importance of considering job readiness when working with hard-to-employ individuals. It reviews a range of employment program components and introduces key principles of effective service delivery for individuals with criminal histories.

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* As discussed in later sections, risk/needs assessments also typically yield information about noncriminogenic needs that may be relevant to job-readiness issues. In addition to the responsivity needs (such as indicators of substance abuse and behavioral health), they also may indicate needs such as those related to financial issues (child support and court-ordered debts and fees) or stable housing that may also need to be addressed for successful reentry and employment.

KEY TAKEAWAYS FROM SECTION I

1. RNR principles provide evidence-based guidance on who should be prioritized to receive interventions and help determine what needs those interventions should address in order to reduce reoffending. For employment providers serving people with criminal histories, the RNR principles help determine where resources can have the greatest impact not only on improving the likelihood that individuals can connect to the workforce, but also on increasing public safety by reducing their chances of future criminal activity.

2. RNR principles promote a cost-effective approach by ensuring that resources are focused on individuals with criminal histories who need services most, and are not misspent on individuals with criminal histories who are likely to succeed with little or no interventions (or worse, increase recidivism by interrupting prosocial activities and exposing low-risk individuals unnecessarily to high-risk releasees or probationers).

3. Validated, objective risk/needs assessments are essential for effectively implementing the RNR principles. To the extent that information from these assessments can be appropriately shared by corrections with workforce development professionals and other reentry or community-based service providers, the results can enhance service matching (including for responsivity issues) and reduce the burden of conducting multiple screenings.

4. For individuals with antisocial thinking, behaviors, personality patterns, and peers, cognitive behavioral interventions may be needed both to reduce their likelihood of reoffending and to prepare them for the workplace. Responsivity issues such as learning disabilities and mental, physical, or substance use disorders may also need to be addressed before corrections or employment interventions can be successful.

5. The resource-allocation and service-matching tool detailed in Section III of this paper begins with the application of RNR principles to ensure individuals who have been under corrections control are grouped by risk of future criminal behavior. In doing so, it makes certain that both employment services and recidivism-reduction interventions (including probation or parole supervision) are tailored to individual needs.

II. PROVEN AND PROMISING PRACTICES FOR IMPROVING OUTCOMES FOR HARD-TO-EMPLOY INDIVIDUALS

SECTION II EXPLORES how employment programming can lead to better outcomes for individuals with criminal histories by attending to both their job-readiness and risk-related needs. There is significant overlap between the factors that make someone high risk and those that impact employability. Antisocial attitudes, beliefs, peers, and personality patterns (what criminologists consider to be the "big four" criminogenic risk factors) clearly affect how someone might perform in the workplace. Individuals with these characteristics tend to have more negative attitudes about working, less stable employment histories, and an unwillingness to take low-paying jobs.[39]

Employment programs are exceptionally well positioned to address risk factors because they already have large numbers of adults with criminal histories coming through their doors and can provide a prosocial environment that counters negative peer influences and the amount of time individuals spend engaged in antisocial activities. Redressing risk-related attitudes and behaviors not only helps keep individuals out of prisons and jails, but also makes program participants more employable.[40] These mutually reinforcing benefits underscore the value in developing an approach for working with individuals with criminal histories that integrates best practices from the workforce development and corrections fields.

This section examines common challenges faced by hard-to-employ individuals, and proven and promising practices for overcoming those challenges. The discussion focuses on two topics:

1. **Employment program components to improve work outcomes (what to do):** This subsection outlines some promising components that are common in the workforce development field and attend to the needs of hard-to-employ individuals (including individuals with criminal histories)[*]

2. **Principles of service delivery to reduce recidivism (how to do it):** This subsection reviews five service-delivery principles that have been shown to reduce recidivism and can be applied to employment interventions. This discussion is only relevant to individuals with criminal histories.

These program components and service-delivery principles can be used to develop integrated service packages (discussed more fully in Section III) that address both the risk levels identified through the RNR assessment and the employment needs of individuals with criminal histories.[†]

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[*] The components are drawn from research on employment programs for hard-to-employ individuals broadly, rather than just those for individuals with criminal histories, because of the applicability of the findings and the paucity of consistent research findings regarding this latter subgroup. Although a growing number of programs focus exclusively on individuals with criminal backgrounds, the majority of programs in this field have come out of welfare reform efforts and other broader workforce development goals.

[†] In addition to many expert advisors, section II was written in consultation with then-Public/Private Venture (P/PV) Senior Fellow Sheila Maguire. The content is meant to complement P/PV's publication, *Supporting Second Chances: Employment Strategies for Reentry Programs*. Sheila Maguire, Laura E. Johnson, and Angelique Jessup, *Supporting Second Chances: Employment Strategies for Reentry Programs* (Philadelphia: Private/Public Ventures, 2012).

It is important to note that the research on how to improve employment outcomes (especially retention of unsubsidized jobs) for individuals with criminal histories is thin, due in large part to a lack of rigorous evaluations of existing programs.[41] While many studies have been conducted, few adequately control for participants' self-selection into programs and the studies that do have a high-quality research design have shown mixed results.[42] One of the challenges with research on workforce development strategies in general is that there is a tremendous amount of diversity in how programming and services are delivered across the field and there is little standardization in how agencies and nonprofit organizations operate—or even measure their success. Research findings are often heavily qualified, citing concerns about drawing conclusions about the effectiveness of particular programs when implementation varies so widely across programs and jurisdictions.[*] That said, research has revealed some promising practices for addressing the needs of hard-to-employ individuals. Given the important role employment plays in helping individuals reintegrate into the community, there is considerable value in helping the reentry and workforce development fields adopt and test innovative strategies for improving employment outcomes among their shared population.

KEY TERMS AND DEFINITIONS USED IN THE WORKFORCE DEVELOPMENT FIELD

Hard to Employ: A term commonly used to describe individuals with chronic unemployment. It is often associated with such attributes as low levels of education (personal factors) or having a criminal record (external factors). In cases in which external factors determine that individuals are hard to employ, it is important to note that this classification does not indicate their job readiness.

Job Readiness: A determination based on personal characteristics that make an individual more or less competitive in the labor market. These characteristics generally include personal and family challenges, education and hard-skill deficits, soft-skill deficits or related attitudinal issues, and other needs that may impair an individual's ability to attain and retain employment (including what the RNR model considers "responsivity" factors). It is common for less job-ready individuals to have multiple, complex needs; although it is also possible for a single, severe problem to prevent readiness.[43] Services to address these obstacles to job placement are referred to as job-readiness or job-preparation services throughout this paper.

Job-Readiness Assessments: Typically a structured series of questions to help collect consistent, useful information from potential program participants. Most job-readiness assessments commonly ask questions about a person's history of employment; education and certification accomplishments; and attitude toward work, general motivation, and resilience when disappointment occurs.

Source: Definitions for hard to employ and job readiness are based on the definitions used by the MDRC in "Enhanced Services for the Hard-to-Employ," available at mdrc.org/project_12_8.html.

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[*] It is important to bear in mind that programs tend to fall along a continuum of effectiveness, and outcomes are often dependent on a wide range of factors.

The Needs of Hard-to-Employ Individuals

The term "hard to employ" can be used to describe individuals who, owing to their personal issues and external factors, have a particularly difficult time connecting to the labor market. Characteristics associated with people who are hard to employ include, for example, challenges with transportation and housing, education and skill deficits, and health or other needs that impair an individual's ability to attain and retain employment (including responsivity factors). Table 1 lists some of the common characteristics of hard-to-employ individuals.

TABLE 1. EXAMPLES OF COMMON CHARACTERISTICS OF HARD-TO-EMPLOY ADULTS

Family, Logistical, and Legal Challenges	Education and Skill Gaps	Needs Related to Responsiveness to Interventions
• Responsible for child care	• Low education level	• Mental illness
• High-conflict family situation	• Lack of occupational skills	• Substance use disorder
• Transportation problems	• Limited work experience	• Learning disability
• Lack of stable housing	• Lack of "soft" job skills	• Lack of motivation
• Legal barriers to employment	• Gaps in work experience	• Negative attitudes about work
• Lack of proper documentation		• Poor physical health

Sources: LaDonna Pavetti, "Helping the Hard-to-Employ," in *Welfare Reform and Beyond: The Future of the Safety Net*, ed. Isabel V. Sawhill, et al., (Washington: Brookings Institution Press, 2002), 135-142; Harry Holzer, Steven Raphael, and Michael Stoll, "Employment Barriers Facing Ex-Offenders," presented at *Reentry Roundtable on The Employment Dimensions of Prisoner Reentry: Understanding the Nexus between Prisoner Reentry and Work*, New York University, May 19-20, 2003; Krista Olson and LaDonna Pavetti, *Personal and Family Challenges to the Successful Transition from Welfare to Work* (Washington: Urban Institute, 1996).

Individuals with criminal records are often considered a subgroup of the hard-to-employ population because, as mentioned earlier, having a criminal record can create significant additional barriers to employment, including statutory limitations on accessing particular professions,[*] employer reluctance to hire individuals with criminal records, and logistical issues resulting from the terms of an individual's release or supervision. People under probation or parole supervision may be required to take drug tests, meet with supervision officers during work hours, or adhere to curfews that limit job opportunities. Supervision compliance challenges are especially problematic because conditions of release and supervision may require an individual to demonstrate efforts to seek or obtain employment. Probation or parole may be revoked for repeatedly failing to meet these conditions (although such an action would typically occur only if there were multiple violations of other conditions).[†]

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[*] See the discussion and resources on page 5.

[†] Conditions of release/supervision are often determined at sentencing or by parole boards, and may not always be changed easily by parole or probation officers to accommodate the needs of individuals participating in employment programming.

Although the presence of a criminal record (particularly for a felony offense) typically defines individuals as hard to employ, there is still a broad range of job readiness within this group. The distinction is important. Job readiness is determined by personal characteristics that make someone more or less competitive in the labor market, including work experience and skill levels. In reality, individuals with criminal histories commonly have these deficits,[44] but it is also possible for someone returning home after incarceration to be very capable of rejoining the workforce given past work experience, education levels, and professional and technical skills.

Pre-employment Program Interventions: The Importance of Sequencing

The type and strength of job-readiness factors and prevalence of other barriers to employment will affect which types of services an individual needs and when and how they should be provided. For instance, individuals with responsivity issues such as severe mental illnesses, physical health problems, or substance abuse disorders would not benefit from employment services that relate to job readiness until those other needs are adequately addressed through treatment. It may be possible, however, for individuals with less severe issues to receive treatment concurrently with employment programming. This is especially relevant to individuals with criminal histories, who have much higher rates of behavioral and physical health problems than the general population.[45] Family and logistical barriers can also influence an individual's ability to participate in employment programming and should be addressed as soon as possible. The workforce-related recommendations in this paper are only applicable to individuals who are able to participate in and benefit from employment programming.

SUPPORTED EMPLOYMENT PROGRAMS FOR INDIVIDUALS WITH SERIOUS MENTAL ILLNESSES

Some individuals with serious mental illnesses (SMI) may not be a good fit for the type of integrated reentry and employment programming described in this paper, as they will require more tailored or intensive services to address their behavioral health needs. For these individuals, referrals to specialized supported employment programs can help ensure that they get both the mental health and employment services they need.

Supported employment programs are designed to connect individuals with disabilities or SMI with the competitive labor market, while ensuring that they receive the necessary professional support services to succeed. Supported employment programs are closely integrated with these individuals' mental health treatment plans. Research has demonstrated that these programs can improve employment outcomes for the population with SMI.[46] Although these programs are not widespread, they are becoming more common in communities across the country, and should be considered as a key option when available. However, it is important to note that these kinds of programs are typically not designed to reduce individuals' risk of recidivism, and therefore may need to be supplemented by other cognitive behavioral interventions in a comprehensive case plan. When these evidence-based employment programs are not available, existing programs may need to address the responsivity issues among individuals with SMI.

Additional information on supported employment programs is available at store.samhsa.gov/product/Supported-Employment-Evidence-Based-Practices-EBP-KIT/SMA08-4365.

It is important that program administrators screen for functional impairments and other problems that can interfere with employment programming (this can be done in coordination with local service providers and/or corrections staff), and either treat these needs in-house or through referrals to community service providers.

Some risk-reduction, soft- and technical-skill development, or education interventions may also be required before connecting individuals to an employment program or job—although in most circumstances, these services can be provided simultaneously with job-readiness and placement services.[47] Deeply entrenched criminal thinking that makes individuals unresponsive to employment programming will likely need to be addressed with cognitive behavioral interventions before those individuals are able to succeed in programming or in a work setting. However, many higher-risk individuals with less deeply entrenched criminal thinking will benefit from employment programming at the same time as cognitive behavioral interventions, particularly because the development of soft skills that make

> ### FINANCIAL OBLIGATIONS AS DISINCENTIVES FOR EMPLOYMENT
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> Another common characteristic of hard-to-employ individuals with criminal histories is their high levels of financial obligation and debt with poor prospects of repayment upon release from prison.[49] Government officials can often garnish a significant portion of an individual's wages to repay these debts. For instance, child support enforcement officials can garnish up to 65 percent of a noncustodial parent's wages.[50] The individual may also owe fines, fees for court-ordered treatment, and victim restitution.
>
> As a result, individuals are often motivated to pursue informal "under-the-table" employment rather than engage with the formal labor market to avoid having a significant portion of their wages directed to debt repayment.[51] Although there is agreement that child support and victim restitution, in particular, should be prioritized for repayment, this complex challenge requires the attention of employment and reentry service providers—as well as legal advocates who can press claims in court to modify some of these obligations—to help individuals meet their financial obligations within the prosocial structure of formal employment.[52]

someone more employable (nontechnical skills and attitudes, such as professionalism, the ability to collaborate, and communication and problem-solving abilities)[48] overlap with risk-reduction efforts aimed at antisocial attitudes and behaviors. Integrated risk-reduction and soft-skills training programs can be particularly effective. In contrast, education and technical skill deficits typically do not preclude an individual from participating in employment programs or connecting with the labor market unless they rise to the level of functional illiteracy[*] and/or lack a particular skill set required for the position. When possible, these deficits should be addressed at the same time an individual is employed to help with rapid attachment to a job or to provide career advancement.

Employment Program Components to Improve Work Outcomes (What to Do)

There are many programs that have been used over the past several decades in the workforce development field to help hard-to-employ individuals, including those with criminal histories. The discussion that follows highlights some of the common components of those programs that have been the subject of research, although this is far from an exhaustive list. Employment programs that incorporate these different components generally are trying to achieve two broad goals:

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[*] In general, functional illiteracy refers to the inability to read, write, and compute at levels of proficiency necessary for daily life activities. However, definitions can vary and are generally complex, accounting for different types of literacy. For additional literacy definitions, measurements and rates, see Irwin S. Kirsch, Ann Jungeblut, Lynn Jenkins, and Andrew Kolstad, *Adult Literacy in America: A First Look at the Findings of the National Adult Literacy Survey* (Washington: National Center for Education Statistics, U.S. Department of Education, 2002).

Goal 1: **Promote Job Readiness**—Improve individuals' hard skills (e.g., basic education, technical skills, or knowledge of technology) and soft skills (e.g., professionalism, the ability to collaborate, or oral communication) either through education, training, or work experience. Address non-skill-related barriers to employment (e.g., mental health, substance abuse, and logistical challenges such as housing and transportation) with in-house programming or referrals to community-based treatment and service programs.

Goal 2: **Find and Retain Employment**—Link individuals to long-term employment and continue to engage with them after job placement to promote retention, help with reemployment in the event of job loss, and assist with advancement opportunities.

Interventions provided in support of these goals are not necessarily sequential; certain problems may need to be addressed before an individual can begin working, whereas other issues can be resolved concurrently or even on the job.[53] In general, the impact of these different program components is greatest when they are combined to develop a comprehensive employment service package (such as hard-skill training to work in a new industry through a vocational training class, soft-skill development in a workplace professionalism class, and transportation services for getting to work reliably and on time). Research has shown that some of the more successful employment programs take a holistic approach to achieving these goals by drawing on multiple components simultaneously or in quick succession.

THE AMERICAN JOB CENTER NETWORK

The primary source for workforce development services is the federal Workforce Investment Act (WIA), enacted in 1998. WIA established the American Job Center Network (formerly the One-Stop Career Center Network) to provide employment and training services throughout the country. These centers are managed by state or local Workforce Investment Boards (WIBs), which are chaired by private-sector members of the community in order to encourage business participation in the process. It is the responsibility of the WIBs to connect American Job Centers with key partners, including public employment service providers, public assistance programs, community colleges, and other training or education providers.

The services provided through the American Job Center Network can vary across jurisdictions, but core services include providing information on job vacancies and student financial aid, and assisting with conducting a job search, writing a resume, and interviewing.[54] Although these core resources are very useful for more job-ready individuals, they are generally not considered sufficient alone for connecting less job-ready individuals with sustainable employment.[55]

For less job-ready individuals, some centers provide more advanced services (primarily focused on education and training), or refer individuals to other service providers for higher-level interventions. Policymakers and American Job Center leaders may need to consider new ways to build capacity and better target resources to maximize outcomes for individuals with criminal histories who are less job ready.

For more information on American Job Centers, see careeronestop.org. In the future, resources for job seekers will be consolidated under a single, streamlined website, which at this writing can be previewed at jobcenter.usa.gov.

Goal 1: Promote Job Readiness—Program Components

The program components that promote job readiness are intended to prepare an individual for competing in the labor market by increasing technical and soft skills and addressing other logistical or health problems that may reduce an individual's employability. Job-readiness services are not, however, always prerequisites to employment (except, as described above, in cases such as behavioral health and other severe impairments). Because of the need for immediate income, many individuals should not wait to go through lengthy training programs, education courses, and other extensive preparation before securing a paid position for which they are capable. Assessments should be used to determine the timing, level, and type of job-readiness interventions that individuals need.

• Education and Training

Education and training cover a wide range of programs, including Adult Basic Education (ABE), General Educational Development (GED) preparation and certification, and post-secondary coursework, including vocational training.[56] Education and training are key components of job-readiness preparation and are critically important for increasing access to higher-quality employment opportunities.[57] Whether an individual receives basic education, post-secondary education, or more technical training is dependent on his or her distinct set of needs.

Basic education programs are oriented for adult learners (typically those reading below the ninth-grade level) and provide instruction in fundamental reading, writing, and mathematics skills. English as a second language (ESL) also falls into this category. Post-secondary education programs serve individuals with higher education levels and are often provided through partnerships with local community colleges.

> ***Implementation Tip:*** *Education programming tends to have the greatest impact on employment outcomes if it results in credentialing, such as completion of a GED, a post-secondary degree, or a trade license.[58]*

> *Teaching basic skills in the context of work rather than using traditional education formats helps students make the connection between basic education skills and the working world—revealing the real value of this training and facilitating skill retention when they are on the job.*

Sectoral training programs are a promising type of vocational training designed to improve the employment prospects of low-income workers by understanding the particular needs of the local labor market and training participants to meet those needs. Employers' feedback is addressed through the curriculum development and reflected in the instruction, which better positions program staff to broker job placements for program participants.[59]

> ***Implementation Tip:*** *Sectoral training programs have been shown to be most effective for individuals with at least a GED or high school diploma.[60]*

• Soft/Cognitive-Skill Development

Soft-skill development, including addressing cognitive-related attitudinal issues, is crucial for promoting individuals' success in the workplace. Typical soft-skill programming includes instruction on how to be professional on the job, how to manage conflicts with coworkers or

superiors, and how to manage time to ensure punctuality. Depending on individuals' deficits, they may be taught these skills prior to job placement, on the job, or both. The length of the course and setting (classroom or workplace) should vary by individual and program. For instance, programs with a transitional-job component may feature a shorter class, as soft skills can continue to be taught in the context of work by the program staff overseeing the workers. However, if a program is placing individuals into jobs with outside employers, they need to first ensure that basic soft skills such as professionalism and conflict resolution are developed and that individuals' attitudes toward work have been addressed.[61]

> *Implementation Tip:* *Motivation and attitudinal issues are best addressed through cognitive-based, social-learning approaches (i.e., using structured learning experiences to model and reinforce positive attitudes and behaviors).* *

> *Programs can develop certificates of employability or rehabilitation for individuals that complete soft/cognitive-skill classes. Research has shown that employers respond positively when programs formally certify the job readiness of an individual.*[62]

• Transitional-Job Placements

Transitional jobs are a type of subsidized employment program in which temporary, income-generating employment is provided to hard-to-employ individuals with the goal of improving their employability through work experience, skills development, and supportive services.[63] What distinguishes transitional jobs from other subsidized employment is that they are intended to be a temporary, developmental experience that helps individuals learn and apply basic work-readiness skills to improve their competitiveness in the job market. The length of transitional-job placements varies by program and participant, but tends to range from 30 to 90 days. The wages for these job placements are typically paid in whole by the service provider agency, which serves as the employer of record.†

> *Implementation Tip:* *Research has shown that the impact of transitional jobs can vary depending on the length of the placement.*[64] *Programs should ensure that placements are long enough to teach the necessary skills, but not so long that individuals are no longer benefiting from their involvement in the program.*‡

• Non-skill-Related Interventions

There are a number of additional challenges that may prevent an individual from finding and maintaining employment that cannot be directly addressed by traditional job-preparation strategies.

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* Cognitive approaches that incorporate social learning techniques are considered best practices in the corrections field. There are a number of different cognitive therapy programs that are used with individuals who have been under correctional control. For additional information on these programs, see static.nicic.gov/Library/021657.pdf.

† There are a number of ways in which transitional-job programs can be funded. While nearly all transitional-job programs require public or private funding sources to subsidize the job placements, there are some ways in which these programs can recoup costs. For example, some transitional jobs are operated as social enterprises, in which they sell a product or service to the public and use that income to offset the cost of the program. It is also possible to develop job placements that public agencies will partially or fully fund, often out of their maintenance and repair budgets. For more information see Dan Bloom, *Transitional Jobs: Background, Program Models, and Evaluation Evidence* (New York: MDRC, 2010).

‡ In a 2012 study of the Center for Employment Opportunities, the Urban Institute found that transitional-job placements had the greatest effect on short-term unsubsidized employment outcomes when individuals participated for more than 30 days, but there were no additional benefits when participation was greater than 90 days. For more information see Jennifer Yahner and Janine M. Zweig, *Which Components of Transitional Jobs Programs Work Best?* (Washington: Urban Institute, May 2012).

As mentioned earlier, needs related to an individual's ability to learn or respond to programming, such as a serious mental illness, learning disability, or substance abuse issues, may need to be addressed in order for the participant to benefit from an employment program. Less serious problems may be addressed concurrent with other programming. Logistical challenges, including the need for stable housing, clothing, identification, transportation, and child care, may also prevent an individual from obtaining or holding a job. Responding to these needs can be done directly by a program if they have sufficient capacity, but most programs will likely need to establish partnerships in order to develop an extensive support network of social services in the community (especially for more complex needs like behavioral health problems). Partnerships with legal aid programs can also enable programs to provide clients with legal assistance to secure licenses, expunge criminal records, modify child support orders, and address other barriers that have legal solutions.

> *Implementation Tip:* *Screening for behavioral health and other needs that can affect employability or that interfere with training and other development is critical before placing individuals in employment programming.*[65]

REAL-WORLD EXAMPLE OF IMPLEMENTING GOAL 1: PROMOTE JOB READINESS

The New York City-based Center for Employment Opportunities (CEO) operates a transitional-job program that offers job-readiness programming both prior to and during employment. All participants enroll in a five-day pre-employment life skills class that teaches the basic expectations for behavior and performance on the job. During the first week, other barriers to employment are addressed, such as ensuring that individuals have proper identification. Participants are then placed in a transitional job for an average of nine weeks.

During that time, participants continue to receive soft-skill development services from their supervisor and job coach. CEO staff regularly assess the job readiness of participants through the use of a "Passport to Success," a small booklet with a checklist that reflects job-readiness factors (e.g., cooperation with supervisor, effort at work, and punctuality), which the site supervisor completes each day. Once individuals are deemed "job ready," they continue in a transitional job while working with a job developer to find full-time, unsubsidized employment. CEO then provides one year of job-retention services, including financial incentives.

CEO also provides vocational and hard-skill development programming through the CEO Academy. Pre-employment hard-skill services include construction and warehouse training. Job-ready individuals that demonstrate they can maintain unsubsidized employment, but want to pursue higher quality job opportunities, can enroll in a post-placement program that teaches the skills necessary to qualify for vocational programs at a partner community college. CEO pays the full tuition for the training.

For additional information about this program, visit ceoworks.org.

Goal 2: Find and Retain Employment—Program Components

The set of program components that advance finding and retaining a job are intended to eventually link individuals to unsubsidized employment opportunities. Effective connections are typically generated through assessment and matching. There is little evidence that job placements alone will lead to permanent employment, which underscores the importance of job-retention support services. Retention builds the foundation for the stable work history needed for earning higher wages and accessing better job opportunities.[67] The components under Goal 2 can be implemented in combination to help individuals find and retain long-term employment.

• Non-transitional Subsidized Employment

Programs providing subsidized employment but not transitional jobs pay some of participants' wages for a trial period, during which the employers and/or program provides training and support services to better prepare participants for permanent, unsubsidized employment. Unlike transitional jobs, subsidized employment placements typically can convert into permanent jobs for the individual after the subsidy period ends. On-the-job training programs are a common subsidized employment program model, in which the employer is expected to provide training to employees in exchange for a short-term wage subsidy.

> *Implementation Tip: This option is best suited for individuals who do not require intensive job-preparation services, but would benefit from additional training or are struggling to find unsubsidized employment.[68]*

• Job Development and Coaching

Job development and coaching services are intended to connect an individual with unsubsidized employment opportunities. Job developers work with local employers to identify job openings. In contrast, job coaches help prepare the individual for a job search—developing a resume, searching for appropriate jobs, and completing the application process. Development and coaching responsibilities can be conducted by the same individual, but it is important to note that the skill sets for these two roles differ greatly. The intensity of job-coaching and development services can be tailored to the specific needs of participants, from programs that offer basic, self-directed, job-search assistance to programs with weekly job-coaching meetings and placement quotas for job developers.

Individual job-readiness levels should dictate when an individual receives job development and coaching services. For more job-ready individuals that do not have major risk-related attitudinal and behavioral issues, matching can be conducted right away, often referred to as rapid attachment. For less job-ready individuals, the strategies described under Goal 1 (such as basic skill development) should be completed before, or concurrently with, job development and coaching services.

> *Implementation Tip: When individuals are determined to be job ready and fit for longer-term, unsubsidized employment, it may not be a skills deficit that blocks their opportunity to attach to the workforce. Sometimes collateral consequences and employer concerns may be a barrier to successful employment. Practitioners and job developers need to know how to address these barriers and be responsive to the needs of employers. Job developers should emphasize the skill sets and qualifications of the program participants, and ensure that the participants will continue to have access to the program's support services once employed. Job developers can essentially serve as a free, external human resources department for local employers by assisting with certifications and credentialing and then connecting employers to these potential new hires.*

• Retention and Advancement Services

Retention and career advancement services are typically provided to individuals after placement in an unsubsidized job to assist with any issues that have the potential to impact tenure. Services may include helping hard-to-employ individuals identify and address problems, or assisting with reemployment in cases of job loss. Staff may also work to match clients with higher-paying jobs or education opportunities to promote advancement.* Many programs will develop relationships with employers to mediate workplace issues, facilitate opportunities for advancement, and even provide on-site retention services.[69] Skill and career interest assessment tools can be used to guide longer-term career planning after initial placements.

OTHER STRATEGIES FOR INCENTIVIZING EMPLOYERS

Ideally, hiring should be promoted by first focusing on the positive attributes of clients. Yet sometimes job developers need to explore additional strategies to engage potential employers, such as using state and federal tools and resources that can help protect against loss or provide tax incentives. The Federal Bonding Program effectively insures an employer against financial loss if an employee with a criminal record steals or damages property. The Work Opportunity Tax Credit authorizes tax incentives of up to $2,400 for hiring people convicted of a felony within one year of their release date.

To learn more about Federal Bonding, visit bonds4jobs.com.

To learn more about the Work Opportunity Tax Credit, visit doleta.gov/wotc.

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* Although education and training programs are categorized as job-readiness program components in this paper, they can also be used to promote advancement. When appropriate, programs should continue to connect clients with higher education and training opportunities (ideally that will result in credentialing) after they have connected with the labor force.

Implementation Tip: Engaging individuals in voluntary employment-retention and advancement programs requires intensive marketing and other outreach strategies, strong program participant-staff relationships, and the use of incentives (potentially financial) to promote participation.[70]

Promoting longer-term employment stability over immediate job stability is important. Evaluations of retention and advancement programs show individuals who moved up to better job opportunities during the course of the program on average tended to have better retention outcomes than participants who stayed employed at the same job over the course of the program.[71] This is consistent with research that shows the quality of job placements factors into the effectiveness of employment interventions.[72]

• Financial Work Incentives

Incentives, typically in the form of supplemental monthly cash payments, can encourage job retention. This work incentive model was developed in the 1990s during welfare reform efforts and has been shown to increase employment rates.[73] Payments can be provided for retaining employment or for moving to higher-quality jobs to encourage advancement (as measured by higher wages, better benefits, or full-time instead of part-time employment).[74]

Implementation Tip: Programs that condition cash incentives on full-time work, or participation in job-preparation programming for part-time workers, have been shown to have the greatest impact on employment and earnings outcomes.[75]

These incentives may be especially beneficial to individuals with criminal histories who are non-custodial parents, as this population is only eligible for a very small credit (about a tenth of the credit available to custodial parents) under the Earned Income Tax Credit, which is the largest work incentive program.[76]

REAL-WORLD EXAMPLE FOR IMPLEMENTING GOAL 2: FIND AND RETAIN TRADITIONAL EMPLOYMENT

The Chicago-based Safer Foundation (Safer) began running Pivotal Staffing, LLC in 2005—an alternative staffing agency that provides placement services for individuals with criminal records through the use of job development and coaching strategies. Safer has a performance-based approach to creating or identifying positions, in which its job developers are given income incentives for placements and retention. Safer also provides supplemental services for its program participants, such as transportation assistance, career development services, and retention support groups. Its staff maintains a strong relationship with employers by screening individuals for job readiness and drug use.

For additional information, visit saferfoundation.org.

Integration of Employment Program Components into the Resource-Allocation and Service-Matching Tool

The eight employment program components (listed in table 2 below) have shown promise in jurisdictions where they are being used, but generally have not yet been comprehensively adopted by front-line professionals with scarce resources.

TABLE 2. SUMMARY OF EMPLOYMENT PROGRAM COMPONENTS

Goal 1: Promote Job Readiness	Goal 2: Find and Retain Employment
1. Education and Training	5. Non-transitional Subsidized Employment
2. Soft/Cognitive-Skill Development	6. Job Development and Coaching
3. Transitional-Job Placements	7. Retention and Advancement Services
4. Non-skill-Related Interventions	8. Financial Work Incentives

Implementing a comprehensive initiative that incorporates job readiness, placement, and retention components is a significant challenge for fiscally strapped municipalities, counties, and states. Opportunities for job placement continue to be very limited due to labor market conditions and pressure to reduce public-sector payrolls.[77] As such, it is critical that employment service providers triage their resources according to the job-readiness needs of individuals.

When working with individuals with criminal histories, workforce development providers can further triage their scarce resources by taking into account individuals' levels of risk. It is not feasible to spend thousands of dollars on costly employment program components for every individual reentering society from prison or jail. Simply spreading scarce resources among as many individuals as possible, without regard to their job readiness or risk levels, will have minimal impact on employment outcomes or recidivism reduction and will minimize the impact of whatever dollars are invested. By enrolling lower-risk/more job-ready individuals into less expensive programming or services that can meet their needs (such as basic job-coaching services or job fairs), resources can be freed up for higher-risk/less job-ready individuals to receive more intensive services (such as transitional-job placements or training). This risk/needs-based approach will ensure that resources are not misspent by giving individuals more interventions than they need to succeed. Policymakers and program administrators must be able to use objective assessments and evidence-based approaches to identify, prioritize, and serve the individuals who will benefit most from interventions and achieve system goals.

The resource-allocation and service-matching tool detailed in Section III uses job-readiness assessments to inform the delivery of employment services within risk groupings. Figure 3 illustrates this next step in effectively matching the right services to the right people by further disaggregating lower-risk individuals and higher-risk individuals by their levels of job readiness. These groups can later be matched to the appropriate employment program components.

FIGURE 3. GROUPING LOWER- AND HIGHER-RISK INDIVIDUALS BY JOB READINESS

Low or "Lower" Risk			Moderate/High or "Higher" Risk
Job-Readiness Assessment			
Lower Risk/ More Ready **(GROUP 1)**	Lower Risk/ Less Ready **(GROUP 2)**	Higher Risk/ More Ready **(GROUP 3)**	Higher Risk/ Less Ready **(GROUP 4)**
(GROUP 1) Employment Program Components	**(GROUP 2)** Employment Program Components	**(GROUP 3)** Employment Program Components	**(GROUP 4)** Employment Program Components
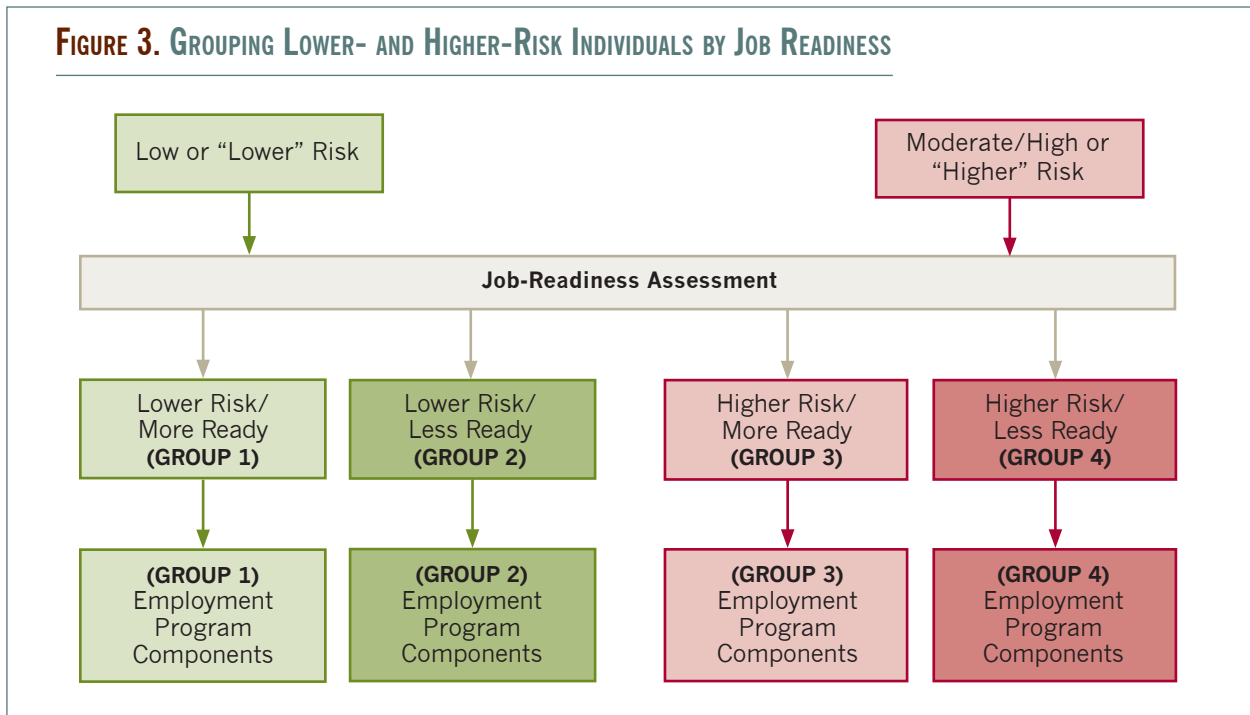
Although it is clear that less job-ready individuals will, by definition, require more services than more job-ready individuals, it is important to note that service packages will be determined ultimately by assessments of individual needs. Because the factors that make an individual more or less job ready are so diverse, this paper can provide a starting point for discussions on appropriate service packages, but it does not dictate particular combinations of interventions that would ignore the need for individualization.

In order, however, to make the potential implementation of the tool more concrete, Section III does provide hypothetical case examples with possible program component options to address them. Ultimately, it will be up to front-line professionals to draw from the report findings and the tool to help determine which of the many program components they need to provide to meet individuals' distinct needs using available resources in their community.

Although job readiness is the primary factor that will influence which employment program components are appropriate to provide, risk should also play a role in these determinations. As discussed in the following section, certain program components can be implemented in ways that can better attend to risk factors while increasing job readiness.

Employment Service-Delivery Principles to Reduce Recidivism (How to Do It)

Recent evaluations have revealed that the way employment programs are implemented (service delivery) can impact recidivism reduction by providing a prosocial, structured, positive environment. There are five basic service-delivery principles that emerge when examining how employment program components can be carried out to both reduce recidivism and improve workforce outcomes. To be clear, these

underlying principles describe how any of the employment program components for hard-to-employ individuals can be structured to address the distinct needs of adults with criminal histories. These principles embrace the tenets of RNR and can help shape employment programs in ways that position them to assist participants in avoiding criminal activity.

Engagement: Address antisocial thinking and behavior through high-impact staff and client interactions (e.g., mentoring relationships or cognitive-based interventions).

Engagement refers to the positive interactions between program participants and staff. People at a higher risk of reoffending will often have entrenched antisocial thinking and behaviors, making it important to establish the support systems and prosocial ties that will help them avoid criminal activity. The impact of engagement can be enhanced by using strategies effective for this population such as research-based cognitive behavioral approaches and motivational interviewing techniques.[78] Staff should be trained on how to work effectively with a high-risk population, develop mentoring-type relationships with clients, and meet frequently in order to engage higher-risk participants in ways that encourage positive behavioral change and accountability. If access is permitted, service providers should try to develop these mentoring relationships before an individual's release to ease the transition to the community and ensure that immediate prosocial supports are available.[79]

Peer supports are also an important part of the engagement process. CEO's transitional-job program evaluation, for example, suggests that engaging individuals through small work crews provides peer supports that can help promote a participant's sense of community.[80] Many program components can achieve benefits through the use of small, interactive classes or peer meetings to discuss challenges such as finding and retaining employment (often referred to as "job clubs" in the workforce development field).

It is important to note, however, that engagement with peers can have unintended adverse effects for low-risk individuals if service providers place them with a group of high-risk individuals in intensive programming. Doing so can actually undermine the characteristics that make a low-risk individual less likely to reoffend.[81]

After release from prison or jail, or at the start of community supervision, employment reentry programs should adapt the intensity and type of engagement to the individuals' levels of criminogenic risk. These efforts will complement the efforts among a growing number of correctional personnel and probation/parole officers who are tailoring their supervision levels and related services to individuals' risk and needs, including the frequency, location, and intensity of their engagement.

Timing: Provide services shortly before or at the time of release, or at the start of community supervision, to address individuals' immediate problems, and adapt the services to individuals' changing needs over time.

Service providers need to ensure that timing is taken into account when matching individuals with appropriate employment-related services. It is not enough to provide the right services to the right people; they also need to be provided at the right time. Programs should engage a participant either before or immediately upon release from a correctional facility (or at the

start of community supervision) and provide more intensive services that attend to short-term needs in the first weeks and months after release.* During this period of particular vulnerability following release, service matching should be focused on stabilizing individuals so that they can participate in employment and other community-based programs. Service matching should also take into consideration the timing and intensity of any court-ordered programs that individuals are required to attend.

One of the most common immediate needs that employment programs can address is financial stability. The majority of individuals returning home from prison or jail face urgent financial challenges, such as rent, food, child support, restitution, and court fees and fines. Therefore, enrollment in programs that provide wages or other monetary support services soon after release is especially important. These cash supports can help position an individual to participate in programs, encourage them to stay enrolled, and help them resist turning to illegal sources of income.

However, for individuals with significant soft-skill and risk-related cognitive and behavioral deficits or responsivity issues, the immediate priority should be addressing those risk factors before finding employment. Within the high-risk grouping, there can be significant variation in individuals' readiness for work. Community supervision officers or other case managers that have access to risk and needs assessment information should work with employment service providers to help them gauge whether an individual's risk factors need to be addressed before that person can be placed in a work setting, or if those factors can be attended to at the same time that job-placement services are provided.

Over time, individuals' levels of job readiness and overall stability will likely change, requiring adjustments to the combination of program components they receive. What a person needs in the first few weeks and months after release may well be different from what they need 12 or 18 months later. A work-first strategy (i.e., prioritizing connecting someone to a job over education or training) may be appropriate during the first few months of an employment program, but as individuals' needs are addressed, they may be better positioned to benefit from a vocational training program that provides the skills needed to access better job opportunities. Just as important as changing or adding services is the need to ensure that participants are not enrolled in program components longer than necessary. Keeping someone in an education or training class for too long without providing meaningful opportunities to find a job may undercut their motivation for staying in the program. The use of career-planning assessments and closely monitoring progress can help service providers tailor the timing of program components to individual needs.

Incentives: Increase motivation for positive change and improve job performance with such measures as stipends for maintaining employment and peer-supported recognition for program completion.

Research confirms that behavioral change is facilitated when positive incentives outweigh punitive actions.[82] For individuals with very limited experience with success and achievement,

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* While this paper focuses primarily on services provided in the community, it is important to note that service providers should be looking for opportunities to advance job readiness prior to an individual's release from prison or jail. Many correctional facilities provide some education or vocational training (as discussed in the text box on page 26).

incentives can be a powerful way to encourage good decision making. It is important to use incentives to encourage program participation and job attainment and retention. Financial support can be one of the most powerful incentives because it can be both a motivator and stabilizer. There are several types of financial incentives that can be used in employment programs. The most obvious is the provision of wages through employment. Most individuals returning from prison or jail want to find a job, and believe that employment is essential to successful reentry.[83] As a result, programs that place individuals in jobs (transitional, subsidized, or traditional) that provide immediate income tend to have better rates of program retention.[84] Programs can also provide incremental wage increases or raises at key milestones to reflect individuals' performance on the job. Other financial incentives include support payments for housing, child care, and transportation, and retention bonuses for individuals that find and maintain traditional, unsubsidized employment.

Program participation and positive behavioral change can also be promoted through non-financial incentives, such as recognition or awards provided in the presence of peers. Acknowledging certain milestones can help an individual stay motivated through the long and difficult process of finding a job. It is also important to ensure the program components align with the self-reported needs of participants (e.g., move them toward credentialing in a particular trade, finding a higher-quality job, or gaining immediate access to income) in order to achieve both personal and program goals.

Because most higher-risk individuals tend to have a long and substantial history of failures, appropriate incentives should be used more frequently than sanctions. Program participants with criminal histories should be aware of which types of sanctions result from particular misconduct before they are applied.[85] When sanctions are called for, they should be proportionate to the seriousness of the violation and used in quick response to misbehavior or violations of supervision conditions.[86]

Coordination: Collaborate with corrections, workforce, and reentry professionals and other service providers to ensure that interventions are provided in ways that support recidivism-reduction and employment goals.

Coordination among representatives from the many different agencies or organizations working with people under correctional control is essential for addressing criminogenic risk and responsivity factors that may undermine the effectiveness of employment interventions. Jail or prison staff, community supervision officials, employment and treatment service providers, employers, case managers and reentry coordinators, and individuals with criminal records (and their families) are among the many people who need to work together to build on any programming done in facilities and to establish the most effective plan for inmates transitioning to the community or beginning supervision.

Employment and corrections coordination is critical. Information sharing, especially regarding assessments, not only contributes to efficiency and reduces each system's draw on public resources, but can also help ensure that the right people are getting the correct combination of services with an appropriate level of intensity. Coordination can increase support for supervision requirements while helping to ensure that these mandates do not interfere with employment or other positive

change that can reduce recidivism. It is important to clarify the roles of community supervision officers and service providers and then support these roles through written policies and procedures. Employment and corrections personnel may also want to engage in some informal cross-training to ensure that each other's core principles and strategies are well understood.

Collaboration with other service providers (such as addiction or mental health treatment, housing, civil legal service providers, and other reentry outreach professionals) can also help ensure that intervention timing is coordinated and criminogenic needs and responsivity factors are prioritized. Employment services should be just one part of a comprehensive reentry case plan. Information sharing and coordinated responses may require formal cooperative agreements and legal assistance to meet all federal, state, and other privacy mandates.[*]

Finally, service providers for individuals with criminal histories should help support local employers. Employers may need to be kept updated on these employees' progress and outside appointments, program status, changes of address, and other information—particularly for high-need individuals. Service providers should view employers as potential partners and give them opportunities to be involved in the reentry employment planning process and express feedback and concerns about their employees or the design of program components. It is also important to coordinate with employers when developing training programs to ensure that the curriculum aligns with the needs of the local labor market. Every effort should be made, however, to minimize the imposition on employers of paperwork and administrative tasks that they may find burdensome.

Structured Time: Organize individuals' time with effective programming and positive activities to minimize opportunities for criminal actions and time with antisocial peers.

Individuals at higher risk for criminal activity should spend the majority of their time in planned, prosocial activities. A highly structured employment program can help ensure that higher-risk unemployed individuals are occupied as much as possible every day, either through enrollment in job-preparation programs or job placements. These employment programs can complement and connect with other constructive after-hours activities. Occupying so much time in structured activities addresses several core criminogenic needs: Antisocial influences from peers are minimized, free time is occupied in noncriminal activities, and program participants can practice new skills in these activity settings.

If individuals have a supportive family and/or are taking responsibility for family-related duties, job-preparation programs should be balanced with their time and commitments at home. Lower-risk individuals need to be protected from highly structured, time-consuming program requirements. Research is clear on this point: overwhelming lower-risk individuals with additional program demands can undermine the very qualities that define them as low risk by interrupting family time and prosocial activities.[87]

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[*] For information on facilitating systems-level information sharing across the mental health and criminal justice systems, see John Petrila and Hallie Fader-Towe, *Information Sharing in Criminal Justice–Mental Health Collaborations: Working with HIPPA and Other Privacy Laws* (New York: Council of State Governments Justice Center, 2010).

Integration of Service-Delivery Principles into the Resource-Allocation and Service-Matching Tool

Policymakers and service providers must ensure that employment program components (education, training, skill development, etc.) are delivered in ways that effectively address the needs of individuals with criminal histories. In other words, pick the right thing to do, and do it right.

Individual risk factors should help determine the intensity of service delivery provided to individuals. For example, higher-risk individuals will need more intensive engagement immediately following release or at the beginning of supervision. This group may need greater incentives, coordination, and structure as employment program services are delivered. Intensity can refer to the number of services an individual requires, the frequency with which a particular service is provided, and the characteristics of the interaction or engagement with the participant. By modifying the intensity of service delivery, employment program components can be tailored to better address individual risk factors. For instance, an individual may only require one type of job-preparation service, but can be enrolled in a program that meets daily to increase its intensity.

As figure 4 illustrates, once individuals are grouped according to criminogenic risk and job readiness, the resource-allocation and service-matching tool can help determine the intensity of the service delivery they receive. The risk/readiness categorization results in four groupings. Note that for the higher-risk groups, it is critical to prioritize cognitive behavioral interventions to reduce the likelihood of reoffending and improve their ability to succeed in the labor market. Section III examines how service providers can match individuals in all four groups to distinct, integrated service packages.

FIGURE 4. MATCHING EMPLOYMENT PROGRAM COMPONENTS AND INTENSITY OF SERVICE DELIVERY
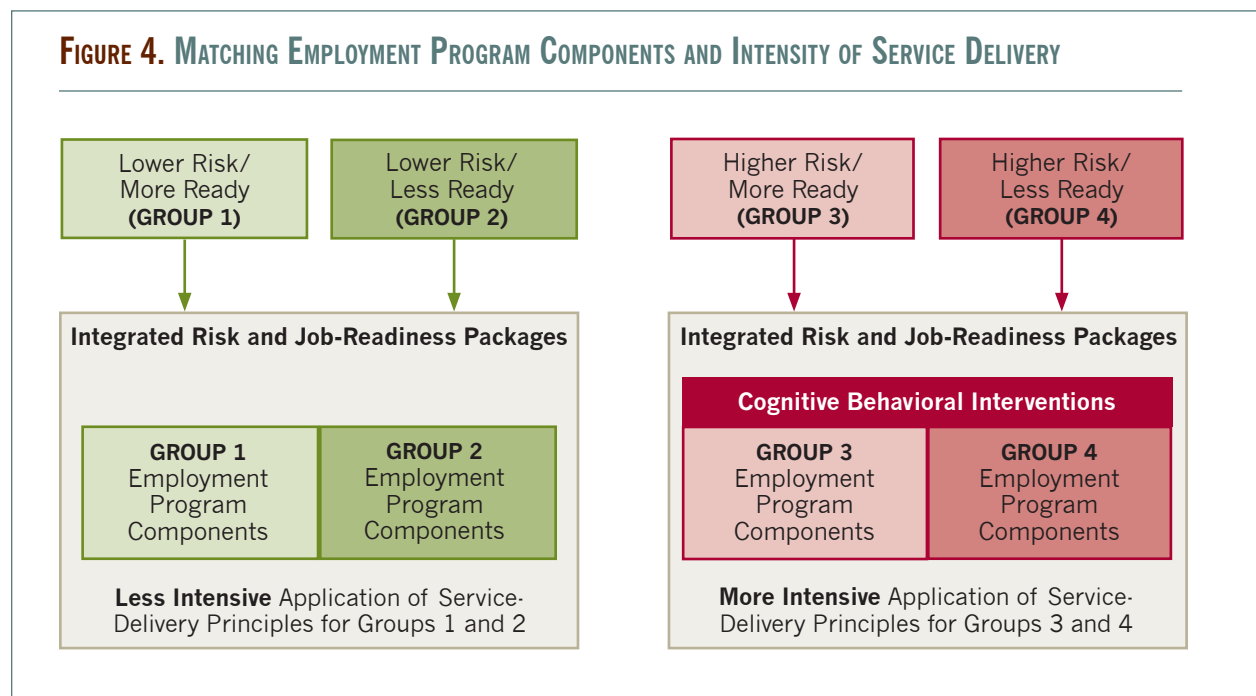
KEY TAKEAWAYS FROM SECTION II

1. People returning to the community from correctional facilities or who are under probation or parole supervision represent a subgroup of the hard-to-employ population that many American Job Centers and workforce development practitioners already serve on a daily basis. Although individuals with criminal records share many of the same challenges as the hard-to-employ population, they have additional barriers to employment that must be addressed.

2. There are workforce program components that can be used for individuals with criminal histories to improve their employment outcomes, including education and training, soft/cognitive-skill development, transitional job placements, non-skill-related interventions, subsidized employment, job development and coaching, retention and advancement services, and financial work incentives. In most circumstances, program components need to be used in combination to meet individuals' complex needs as they change over time. Research has shown that simply helping a high-risk/high-need individual with a criminal history who is not job ready to write a resume and apply for jobs is not enough.

3. The factors that put an individual at higher risk of recidivating (criminogenic attitudes and behaviors, in particular) can have a significant impact on employability. As such, workforce development agencies and employment service providers interested in improving outcomes for individuals with criminal histories should draw from criminal justice best practices and collaborate with corrections professionals that conduct risk/needs assessments to develop integrated responses.

4. This paper suggests that to use resources most effectively, individuals should be grouped first by level of risk, followed by a second assessment to determine job-readiness levels. Distinguishing which people with criminal histories are more job ready and which are less job ready will help guide the service-matching activities described in Section III of this paper that provide the right combination of employment program components.

5. American Job Centers, as well as other workforce-development providers and their partners in the community, can be positioned to improve both employment and reentry outcomes for individuals with criminal histories. This requires the application of service-delivery principles (how to do it) to the employment program components (what to do). These service-delivery principles embrace RNR tenets and require policymakers and practitioners to pay particular attention to how individuals are engaged, the timing of engagement, incentives for program participants, coordination across systems that serve this population, and how individuals' time is structured. The service packages outlined in Section III integrate these principles.

III. THE RESOURCE-ALLOCATION AND SERVICE-MATCHING TOOL:
An integrated approach to reducing recidivism and improving employment outcomes

THE PREVIOUS TWO SECTIONS outlined the characteristics of hard-to-employ individuals with criminal histories, recommended approaches for reducing their likelihood of recidivating, and suggested ways to better position them to succeed in the workforce. To effectively implement those recommendations, policymakers and system administrators need to assess the levels of risk, need, and employment readiness for unemployed individuals with criminal histories and tailor and triage resources accordingly. The resource-allocation and service-matching tool has been developed to help with this assessment and resource-management process and to guide the development of integrated service responses across the corrections, employment, and reentry fields.

FIGURE 5. THE RESOURCE-ALLOCATION AND SERVICE-MATCHING TOOL: PUTTING THE PIECES TOGETHER
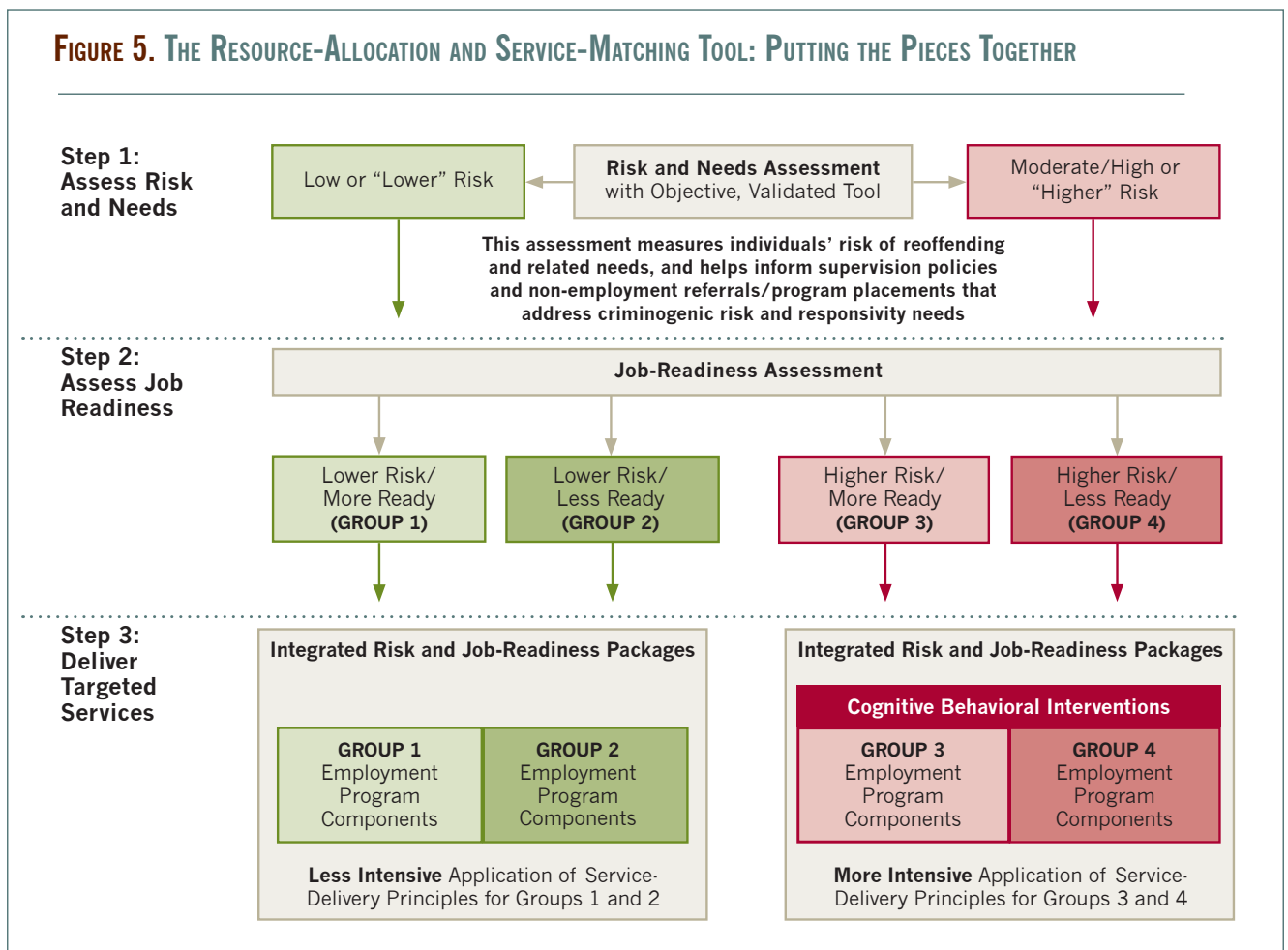
An Explanation of the Tool

The resource-allocation and service-matching tool is based on two key dimensions: the risk of reincarceration and job readiness, which are used for grouping individuals being released from prison or jail or who are under community supervision. There are four groupings that result from these two assessments, and each can be tied to a combination of corrections and supervision policies, employment program components, and service-delivery strategies.

Sorting populations into these four groupings and then identifying the combination of services and supervision that is most appropriate for each subset is a complex undertaking. The precise combination of corrections strategies and services will be affected by the expertise and resources in any particular facility or jurisdiction. Before delving into the details of how to use the tool, there are some important considerations to keep in mind:

- The illustration of the tool and the narrative that follows suggest a clear sequence to assessing risk and needs and then aligning services to address them. In reality, however, the assessment and service-matching processes are iterative; assessments indicating the need for a particular program or intervention may become outdated over time due to relapses, regression, or progress. For instance, risk/needs assessments may be administered pretrial, at intake in a corrections facility, and again close to the time of an individual's release date. Job readiness may be assessed at intake and then reassessed throughout the months following release. Each assessment may yield different information. As people progress and regress during their involvement with the criminal justice system, their risk of reoffense and readiness for employment can change—effectively moving them from one grouping in the resource-allocation and service-matching tool to another. It is important to be mindful of these shifting dynamics and to use the most recent assessment information possible in making service decisions.

- The effective application of the tool relies on the appropriate use of updated objective criminogenic risk/needs and employment-readiness assessment instruments. Corrections should be using assessments validated for their population. Job-readiness assessments, although not typically validated for a specific population, should also reflect the research on what factors are predictive of employability, such as prior employment, welfare history, and educational attainment.[88]

- The tool suggests that each person can be assigned to one of four distinct categories. Defining distinct groupings can be very useful in making resource-allocation decisions at an administrative level and making referrals to particular service providers. When developing individual service plans, however, it is important to acknowledge the tremendous amount of diversity within each of these groupings. Every factor that is related to both criminogenic risk and job readiness has a spectrum of severity, functional impairment, and duration. Every service/supervision package supported by a network of community providers will ultimately need to be fine-tuned to each individual within each of these categories.

Despite these issues, the tool illustrates the paradigm shift necessary to develop the type of assessment-driven integrated responses needed to reduce reincarceration and improve job readiness among individuals with criminal histories. The following section walks the reader through the use of the resource-allocation and service-matching tool. The discussion focuses on how to identify different target populations and create tailored service packages. Sample scenarios are then provided to illustrate how an individual from each of the four groupings might be matched with services that address their specific reentry and employment needs.

> Although these scenarios provide examples of possible service packages (one of many potential combinations) and outcomes, they assume the availability of extensive resources, sometimes even ideal capacities, in order to highlight for readers a wider range of options. This abundance of resources is obviously not the reality found in most communities. These somewhat ideal scenarios do, however, illustrate a broader range of options that could potentially be made available.

What the use of the tool requires, then, is that program planners and administrators, as well as practitioners and front-line staff, collaboratively address how to make the most of available resources and determine if other partners can be brought to the table to expand the pool of resources and expertise. Through cross-systems discussions, the potential for reentry, employment, and corrections professionals to derive a greater impact from their investments is very promising. By using coordinated interventions to address criminogenic risk, workforce service providers' investments are less likely to be squandered on individuals that not only fail to enter the labor force, but are reincarcerated (making it even harder to become employed when re-released). Corrections professionals should be able to help structure probationers' and parolees' time in prosocial settings by drawing on employment services that are matched to supervisees' job readiness and that help secure the first steps to stability. And reentry professionals can focus their support on these and other efforts that can help individuals more successfully join the workforce.

How Policymakers, System Administrators, and Practitioners Can Use the Resource-Allocation and Service-Matching Tool

There is no question that corrections, employment, and reentry policymakers, administrators, and practitioners want to increase public safety by reducing reoffending, encourage individuals' successful return to the community, and improve rates of employment by using their resources to the greatest effect. Unfortunately, they sometimes lack the necessary information to make effective resource-allocation decisions to further these goals.

The tool includes three steps:

1. Assess risk and needs

2. Assess job readiness

3. Deliver targeted service packages based on risk/readiness groupings

There are many benefits that can be derived from the implementation of each of these steps:

Step 1: Assess Risk and Needs

The reliance on assessments allows the resource-allocation and service-matching tool to be used for capacity planning, program design, and service/supervision intervention package development. After selecting validated and current criminogenic risk/needs assessment instruments, administrators will need to determine what "cut-off scores" or other boundaries to use in determining which individuals will be deemed "higher risk" and which will be "lower risk" (see sidebar below on "Defining the Groupings"). The size of these groupings should help decision makers appreciate how individuals in correctional facilities and on probation or parole fall on the criminogenic risk/needs continuum. With this information, policymakers and administrators can evaluate their service capacity for addressing criminogenic needs (antisocial attitudes, peers, and thinking, as well as drug abuse and others) and better facilitate discussions among system leaders, line staff, and providers about how available resources can be allocated to meet recidivism-reduction goals. This analysis of needs and service capacity will also be critical when integrating other reentry and employment services in the steps that follow.

Information gleaned from Step 1 activities can also help shape reentry and employment program design and individual intervention plans. The screenings and assessments conducted by the corrections system often identify physical and mental health needs (for which care in correctional facilities is constitutionally protected)[*] as well as other responsivity factors such as education level and cognitive functioning. Probation and parole agencies may also use assessments to identify risk and service needs. Some screenings also include the identification of court-ordered fines, restitution, and child support.

DEFINING THE GROUPINGS

System administrators determine the cut-off scores for grouping individuals, in part, based on the distribution of individuals with "low" and "medium/high" risk and who are "more" or "less" job ready in the population being assessed. Users need to define low, medium, and high risk and level of readiness and then establish benchmarks determined by valid screening and assessment measures. For example, administrators will need to determine what numerical scores from risk/needs assessment tests qualify someone as low risk, and what scores qualify them as medium or high risk. If the resulting groupings do not adequately differentiate the population (for example, 90 percent qualify as high risk), then changes to cut-off scores may need to be made to further distinguish which individuals have the greatest risk. The same applies to assigning values to readiness results.

Administrators will then need to be mindful of their supervision, treatment, and employment resources when prioritizing subgroups and individuals within subgroups. For example, if there are more individuals who fall within a higher-risk category with intensive supervision needs than there are available program slots, a narrower slice of the subgroup should be addressed until capacity is increased. Alternatively, if the assessment process identifies fewer individuals with high risk/low readiness than anticipated, the group selected for more intensive supervision or services can be extended into moderate risk/need levels. It is important to recognize that individuals may move between these categories throughout their lives. Periodic reassessments may reveal the need for changes in how officials prioritize supervision, employment, and other services.

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[*] Access to needed physical and mental health services by inmates is protected under the Eighth Amendment. Corrections facility administrators are required to identify the health needs of inmates, including mental health needs, and provide medication and supports.

All of this information is of value to employment service providers and reentry practitioners. In particular, information sharing with health systems that meets all legal mandates and privacy concerns can help ensure that important information follows the individual from the community to corrections and back to the community. Through closer collaborations, workforce development service providers can improve both employment and reentry outcomes. They can be part of a decision-making process that also improves supervision policies and non-employment-programming and service referrals.

Step 2: Assess Job Readiness

Job-readiness assessments typically ask questions about a person's history of employment, education and certification status, attitude toward work, general motivation, and resilience when disappointment occurs. The results can reveal whether an individual possesses the positive attitude and motivation that are critical to persisting through the difficult job search process and to navigating stressful work environments. The tool encourages corrections professionals either to assess for job readiness as part of their standard assessment practices—using a readiness assessment that works for employment service providers—or to allow employment service providers' access to incarcerated individuals to conduct a job-readiness assessment before an individual's release to help with transition planning. Job-readiness assessments should also account for factors that may undermine or contribute to an individual's success in an employment program (such as health, substance use, and learning disorders). This information would likely have emerged when the risk/needs assessment was conducted, but it is important to screen for this information if the most updated information is not available.* It is imperative that employment providers work with community supervision officers or corrections staff to determine whether an individual's criminogenic risk factors or responsivity issues are severe enough that they must be attended to prior to conducting job-readiness or placement activities.

From a policymaker's or administrator's standpoint, this second assessment step also has tremendous implications for resource allocations. Every jurisdiction has a distinct web of community-based service providers that can be used to reduce the likelihood a person will commit a crime in the future. Like risk/needs assessment instruments, readiness assessments can help reveal the numbers of individuals with criminal histories that require a range of employment-readiness and placement services. This information then can be used to help identify gaps in community-based service provider expertise or inadequate capacity. Screening and assessment information can help policymakers and administrators better understand the size of the population of individuals who may avoid a costly reincarceration if given proper services and supports. In particular, the assessment results can help administrators determine what types of coordinated reentry/employment services should be made available for individuals returning from incarceration or who are under supervision. After Step 2 has been completed, it should be clear what proportion of the targeted population falls into each of the four risk/readiness groupings, and how to shift resources to account for this distribution of needs.

The tool is also meant to help practitioners and program administrators meet demands for accountability by providing data-driven criteria to guide decision making. For example, if there are

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* Pretrial and court services intake forms, with appropriate information-sharing agreements, can complement the screening and assessment processes within jails and prisons. The Pew Charitable Trusts, *Risk/Needs Assessment 101: Science Reveals New Tools to Manage Offenders* (Washington: Pew Center on the States, The Pew Charitable Trusts, 2011); Bonta and Andrews, *Risk-Need-Responsivity Model for Offender Assessment and Rehabilitation.*

only 100 slots for a particular employment program, and the risk/needs assessment ranks 150 potential program participants as at high criminogenic risk with high need for services, it may be necessary to examine that group more closely to further distinguish those whose receipt of interventions would make the biggest impact on recidivism and employment outcomes. Additionally, if a lower-risk group is taking up some of the slots for services that affect employability, then it is worth considering whether some of those spaces could be freed up to serve individuals who will benefit more from the service. While these decisions can be difficult, the sorting tool can help guide these choices on how to make the most efficient use of public resources so that neighborhoods and families reap the greatest benefits.

Armed with assessment information, employment service providers can better direct interventions that are tailored to the needs of the population they are serving. By integrating program components and guiding their implementation with service-delivery principles, they can increase the impact of their efforts by attending to risk factors.

Step 3: Deliver Targeted Services

By applying the principles associated with risk reduction to employment program components, service packages can be tailored to address individuals' distinct criminogenic and job-readiness needs. The service packages described below have two elements:

1. Employment program components guided by job-readiness factors
   (but may also be influenced by risk considerations)

2. The principles of effective service delivery, including intensity considerations,
   based on risk/needs and responsivity levels

These service package descriptions are not meant to be exhaustive, but merely demonstrate the broad range of responses that can be applied to different groupings. Although the proposed service packages may not reflect the capacity of many jurisdictions, they should help present options if resources can be expanded or reallocated. Case examples are provided to demonstrate the integration of the service-delivery principles with employment program components. Given the significant variation among individuals, even within a particular grouping, the suggestions are not intended to be prescriptive at the individual level.

These case examples for each group also do not represent full case plans; rather, they are intended to highlight some of the key aspects of a collaborative reentry and employment effort. In reality, program participants may have other responsibilities or service needs that should be addressed through comprehensive case planning before they are prepared to engage with an employment program, or even concurrent with their participation in such a program. In many cases, a probation and parole officer or a reentry planner will handle much of the case management. Employment service providers are not expected to shoulder the responsibility of all case management needs for this population. Nonetheless, these examples focus on the specific needs that employment service providers will likely need to address either directly or through referrals to other community-based service providers.

Groups 3 and 4: The Higher-Risk Groups

GROUP 3:
Higher Risk/
More Ready

GROUP 4:
Higher Risk/
Less Ready

Groups 3 and 4 both consist of individuals that are at higher risk of future criminal activity, but have notably different levels of job readiness. Therefore, Group 4 (less job ready) will require more employment services than Group 3 to increase their employability; however, both groups will require intensive risk-reduction services to reduce their likelihood of reoffending. The more intense application of service-delivery principles (including corrections supervision coordination) will look very similar for both of these groups because of their higher-risk levels. In contrast, employment program components will be individually tailored to address different job-readiness levels.

Employment Program Components for Groups 3 and 4

Goal 1: Promote Job Readiness

Group 4 individuals will require programming that prepares them for employment and is also highly structured and engaging. Transitional-job placements can be well suited for targeting the needs of Group 4 given their integration of job-readiness services and intensive levels of engagement. If transitional-job resources are unavailable, education and soft-skill classes can also be intensive and effectively attend to job-readiness needs. It is important that service providers continually evaluate the job-readiness levels of Group 4 individuals to determine when they are suited for unsubsidized, competitive employment and can benefit from placement and retention services. As Group 4 individuals become more prepared for work, it is then appropriate to provide programming focused on finding and retaining employment.

In general, Group 3 individuals (higher risk/more job ready) should be provided with employment program components that focus less on soft-skill development and other basic job-readiness services than their Group 4 counterparts. Based on their job-readiness profile alone, Group 3 individuals may benefit more from employment program components that will help them find and retain employment, such as sectoral training versus basic education. However, because individuals in Group 3 are high risk, service providers should look for any risk-related attitudinal or behavioral issues that undermine their employability and engage these individuals in structured, prosocial activities that are appropriate for their higher level of job readiness.

To ensure that both of these higher-risk groups are truly ready for employment, service providers working with this population should prioritize the provision of cognitive behavioral therapy or other risk-reduction services (either in-house or through referrals) when the factors that make the individual high risk or unresponsive to interventions also affect their readiness for employment. Whenever possible, these services should be provided alongside other job-readiness efforts.

Goal 2: Find and Retain Employment

Groups 3 and 4 will both benefit from program components that focus on connecting to the labor force, although the timing of the delivery of these services will likely differ. Because of their higher levels of job readiness, Group 3 can usually be targeted for job-coaching and development services right away when coupled with risk-reduction strategies (assuming their cognitive and behavioral skills are high enough that they can successfully join the workforce). After Group 4 has received adequate job-readiness services, they, too, will need assistance finding unsubsidized, competitive employment through job-coaching and development strategies. For individuals placed in a transitional job or other temporary work setting, in order to prevent employment gaps, a job coach and developer should begin working with the individual on finding a permanent job while they are still working in a temporary setting. For individuals that only receive class-based job-readiness services prior to being placed in an unsubsidized job, intensive follow-up services will likely be needed to ensure that they are well supported as they make the transition into the workforce.

After connecting Group 3 and 4 individuals with jobs, it is imperative that employment programs continue to provide retention and advancement services. These services should be highly intensive for at least the first year after placement, and will likely need to include reemployment services given the often low levels of retention for hard-to-employ individuals. Financial incentives should also be provided to these groups to encourage job retention and/or advancement when possible.

The Application of Service-Delivery Principles for Groups 3 and 4

Engagement:

Service providers should engage Group 3 and 4 individuals in mentoring-type relationships and meet frequently to promote positive behavioral change. These relationships should be strengthened through the use of cognitive behavioral therapy, social learning approaches, and motivational interviewing techniques. Probation and parole officials should prioritize supervision resources for these groups, and also engage individuals through impactful interactions. This may require more frequent check-ins, home visits, and oversight tailored to individual needs.

Peer engagement can be promoted through different types of employment program components. For instance, a less job-ready individual in a transitional job could engage with peers through small work crews, whereas a more job-ready individual receiving job-coaching and development services could engage with peers through regular group meetings to discuss work-related challenges.

Timing:

Prior to and immediately following release, it is critical that Group 3 and 4 individuals receive intensive services that address their criminogenic needs and other destabilizing factors. Employment service providers should be in contact with and/or conduct job-readiness assessments of individuals in prison or jail prior to their release, when possible, or at the start of probation or parole in order to plan appropriate interventions and ensure services can be provided. Risk-reduction services and cognitive behavioral-based services are of particular importance on the heels of release to ensure a continuity of care from

prison or jail to the community and because the days directly following return to the community are when many individuals are at the greatest risk for reoffending.[89]

The timing of when more advanced services should be offered will likely differ across Groups 3 and 4 given their varying levels of job readiness. As mentioned above, once short-term stability concerns are addressed, it may be appropriate to quickly move Group 3 individuals into a job-coaching and development program, whereas Group 4 individuals will likely need more basic job-readiness interventions. Continual evaluations of these individuals' job-readiness levels are necessary to determine when they can be moved into more advanced program components that will help them transition into the workforce. Ongoing career planning can also help identify which services are needed at particular points in the process.

Incentives:

Policymakers, administrators, and practitioners should develop policies and practices that prioritize incentives for Group 3 and Group 4 individuals to participate in employment programs and to promote positive work-related outcomes. Examples include participation stipends, pay each week for attendance in a transitional-job program, or other participant-defined rewards for goal achievement (such as transit stipends) when available, as well as communication techniques that encourage an individual to engage in positive change. It is also important to encourage job retention and/or advancement through the provision of financial incentives whenever feasible for certain achievements (e.g., retaining a job for 90 days, advancing to a higher paying job, moving from part- to full-time employment).[90] Non-financial rewards, such as a certificate acknowledging a participant's completion of a program or a speech praising a participant's performance in the presence of their peers, can also be effective motivators. The use of incentives can help reinforce positive behaviors practiced in cognitive behavioral and employment-readiness programs.

Coordination:

Employment service providers and corrections personnel should share information and collaboratively plan for an individual's release from a facility or at the start of community supervision. As discussed earlier, because of the high criminogenic risks and needs associated with Groups 3 and 4, efforts should be made to continue the type of programming these individuals were receiving in prison or jail. Ongoing, frequent check-ins will help ensure job-preparation services and work requirements align with community supervision conditions.

It is also important for employment professionals to work closely with local service and treatment providers to whom they can refer participants for substance abuse, mental health, cognitive behavioral treatment, and other reentry and responsivity-related concerns (with priority given to those needs related to criminal conduct) that may impact an individual's success in an employment program. Similarly, corrections personnel should work with service providers to discuss how relapses frequently experienced related to substance abuse and other common violations of conditions of release and supervision can be addressed to reduce recidivism and encourage employment. Once individuals are placed in jobs, employment program personnel should reach out frequently to employers to address any issues that may arise on the job and to coordinate with local education and training programs that can position

employees to take advantage of advancement opportunities. Updates can be provided to probation and parole officers as well.

Structured Time:

Reducing recidivism for high-risk individuals requires structuring a significant portion of their time in reentry programming, including employment services, and other required activities such as court-mandated treatment or programs required under conditions of release or supervision.[91] The way in which time is structured can be adjusted to reflect individuals' different readiness levels, and job and supervision requirements. Group 4 individuals' time should be structured with program components oriented around promoting job readiness (e.g., education, training, soft-skill development, or transitional-job programs), whereas Group 3 may be better served through structured job-coaching, development, and post-placement services. After-work hours should be structured so they are spent to the extent possible with positive role models, supportive families, and prosocial peers. If individuals do not retain their jobs after connecting with the formal labor market, they should be reengaged in job-matching services and may also need to be enrolled in education or training programs to ensure that their time remains structured.

Case Example (Group 4):

> **GROUP 4:**
> Higher Risk/
> Less Ready

Mike is 24 years old and being released on parole after serving three-and-a-half years of a four-year state prison sentence for possession of narcotics with intent to sell. This was his second felony conviction. Prior to incarceration, Mike frequently supported himself through drug sales, used drugs himself, and spent much of his time with other drug users and dealers. Mike dropped out of high school after tenth grade and has a very limited and unsuccessful employment history. While incarcerated, Mike was enrolled in a GED course but did not complete the program and was uninterested in job-training programs. He was often disruptive and expressed problems with people telling him what to do. Mike was granted parole on the condition that after release he enroll in a community-based drug treatment program and look for legitimate employment.* Mike is also a noncustodial father required to pay child support upon release.

> **Step 1: Assess Risk and Needs:** In the weeks prior to his release from state prison, a risk assessment was conducted by Mike's case manager. Mike was categorized as at high risk for reoffending for a number of reasons, including his history of criminal involvement, drug use, limited self-control, and tendency to rationalize criminal and other antisocial activities. He did not maintain strong connections with his family while incarcerated and appears to lack friends who are not involved in using or selling drugs. Assessment and other related information about the conditions of Mike's release was passed on to the parole officer assigned to his case. The parole officer explained to Mike the benefits of signing a waiver that would allow his assessment

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* In many instances, parole conditions will require parolees to seek employment. This may include the parolees' showing verifiable proof of their job-seeking activities, such as a list of businesses they contacted with names, dates, addresses, telephone numbers, and a contact person. Demonstrated engagement in an employment program, such as a transitional job, will also often meet this requirement. Most parole conditions allot a specific time period to secure employment once released (e.g., 90 days), but failure is unlikely to lead to a revocation where intermediate sanctions can be used and where no other violations have been found (although specific responses will vary across jurisdictions).

information to be shared with community-based service providers to assist him in successful reentry and meeting the conditions of his parole. Mike signed the waiver.

Step 2: Assess Job Readiness: The parole officer sets an intake appointment for Mike at a local employment program that is known to work with a reentry population, and sends his risk-assessment information to the provider in advance. A job coach from the employment program meets with Mike during his appointment to review his risk-assessment information and ascertain his level of job readiness in greater detail. The job coach determines that Mike is not job ready because of his low education levels and lack of soft skills due to his minimal work experience, negative attitudes toward working, and his conflicts with program supervisors while incarcerated. He also notes that Mike's financial obligations and limited support structure increase his need for immediate access to income.

Step 3: Deliver Targeted Services: Mike's profile is consistent with a Group 4 designation. Some of the actions and interventions for Mike could include the following:

» Mike's parole officer provides the job coach with a copy of Mike's parole case plan when he enrolls in the employment program. The program staff that work with Mike meet to discuss how they can ensure that program service requirements and supervision mandates can both be met without impeding program participation or putting Mike at risk of violating his parole. The job coach contacts Mike's parole officer to discuss his service strategy, and the officer agrees to be flexible on scheduling meetings and to keep the service provider apprised of any issues that could affect Mike's continued participation in the program, so long as the employment service provider and other partners provide updates and help ensure that Mike complies with his conditions of supervision.

» During their discussion, the employment service provider and parole officer agree that Mike will make little headway unless motivation, attitude, and criminal thinking are addressed. The parole officer also notes that substance use treatment is a critical intervention for both employability and successful reentry. In order to prevent delays in connecting Mike to employment-related services, they discuss how they can make these interventions concurrent. If there is an available slot, the employment service provider agrees to enroll Mike in "Thinking for a Change," a cognitive behavioral program that is run through the employment organization. If the program is full, the employment service provider agrees to work with the parole officer to find another cognitive behavioral program in the community that can mesh with the employment and drug treatment interventions. The parole officer refers Mike to a community-based substance use treatment agency that uses cognitive behavioral interventions and medication-assisted therapy, and holds group support meetings. The parole officer also encourages Mike to see if he can make some positive, immediate decisions about where to live by suggesting he get in touch with family members who have been a positive influence in the past.

» At the employment program, Mike is placed in a soft-skill development class (one that teaches how to dress, speak to others at work, be punctual, and more), which is designed specifically for high-risk individuals by incorporating the Thinking for a Change curriculum to increase motivation, model prosocial thinking, and help clients develop social and problem-solving skills. (Because slots for cognitive behavioral interventions are available for high-risk individuals within the employment service agency, Mike does not need to attend a class in the community.) Mike is told that if he shows up and participates in the program every day for a week (the first of seven weeks, with classes meeting only twice a week in subsequent weeks), he will have the opportunity to be placed in a paid transitional job.

» After completing the first week of classes, Mike is placed into a transitional job on a six-person work crew that provides groundskeeping services for the local municipality. The crew is closely supervised by a staff member trained in motivational interviewing techniques. The job is four days a week with shorter hours on the two days that Mike attends the soft-skills/cognitive behavioral classes, which continue for six weeks.

» Mike is paid weekly so he can address his immediate income needs. To further incentivize his participation and help Mike financially, the program offers transportation assistance, helps Mike make connections with other social service and reentry supports, and provides food during the soft-skills classes.

» Mike asks the employment program staff for help managing his child support payments. He is referred to the local legal aid program for assistance in filing for a downward modification to his child support payments while he is in the transitional job to ensure he can meet some of his obligation. Program staff notifies the parole officer of the referral and follows up with Mike to ensure that he continues to manage his reduced child support payments during his time in the program.

» While working his transitional job, Mike is paired with a job coach who prepares him for his unsubsidized job search by helping him develop a resume, complete applications, and practice for interviews. These activities occur on the one day of the week that Mike is not working in his transitional job. The coach works closely with a job developer to match Mike with appropriate employment opportunities. Mike remains in his transitional job during his search, with the understanding that if he does not find an unsubsidized job prior to completion of the program,[*] Mike's time will then be structured around risk-reduction services, job-search activities, or other job-readiness services.

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[*] Programs with limited transitional job slots will typically need to have limitations on the length of a placement (e.g., 90 days) to ensure that participation can be prioritized for newly released individuals who have greater need for immediate income and the stability provided through a transitional job placement.

» Once Mike is placed in an unsubsidized job, he stops participating in classroom-based activities to ensure that they do not interfere with his work, although he is referred to a program that provides GED classes that can help him pursue advancement opportunities when he is ready. Mike receives a small monthly financial award from the employment program (not the employer) for the first year on the job to encourage job retention. For every month Mike stays at his job, his name is entered in a quarterly raffle for prizes such as gas cards. The program also hosts a ceremony every six months to recognize participants like Mike who have maintained their employment.

» The job coach and parole officer maintain close contact with Mike and his employer for the first year to help address any issues that arise on the job. The coach also continues to provide Mike with information on how to access services for additional career-planning guidance or reemployment services if needed after he completes the program.

TREATING GROUP 4 INDIVIDUALS WITH LIMITED RESOURCES AND/OR NO TRANSITIONAL JOBS

In the case example of Mike, the workforce development center is well resourced and actively engaged with the community supervision agency. Under these circumstances, the partnering agencies can support a transitional job program and enroll participants in ongoing job-readiness and risk-reduction services. However, such plentiful resources may not be available in many jurisdictions, requiring planners and program administrators to seek creative solutions and effective ways to expand collaborations and capacity.[*]

While the case example focuses on the community supervision-employment program relationship, there may be other key players that can help ensure that individuals get enrolled in necessary services, such as a local reentry task force. It is important for agency leaders and personnel to be clear on what the benefits are for involvement in the partnership, such as improved outcomes for a shared client population, pooling and leveraging existing resources, and sharing elements of a work plan.

The partnership must determine what is achievable with available resources and programming. Transitional employment can offer close supervision, immediate wages for low-skilled workers, and social learning opportunities. Yet sometimes, unpaid work opportunities (such as structured community service programs or internships) or subsidized, supported work programs can provide the necessary experience individuals need to practice positive workplace behaviors and attitudes. These other work experiences, if structured correctly, can provide the same benefits as transitional employment, as it is how services are delivered that impacts risk. To do so, they must include or be supplemented with social learning opportunities, risk-reduction interventions, and/or be closely supervised by someone modeling prosocial behaviors. Classroom-based services, such as education and training, may also be highly structured and incorporate risk-reduction approaches. Unpaid job-readiness services may want to use immediate financial incentives and awards to help support program participants and keep them engaged. All services should be balanced to ensure that individuals can fulfill their obligations but not be overwhelmed by all the program supports they receive.

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[*] Although highlighted in the report, it is not intended that transitional jobs programs be perceived as a silver bullet, even in jurisdictions that can afford them. To maximize their effectiveness, it is important that other supportive services are also provided to participants. For many individuals, classroom-based job-readiness services such as education and training may be more appropriate.

Case Example (Group 3):

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GROUP 3:
Higher Risk/
More Ready

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Tanya is a 21-year-old woman serving a nine-month sentence in a local jail with six months probation for stealing cash and other valuables from a neighbor's home. It is not her first offense. At the time of her arrest, Tanya had few family supports and a live-in boyfriend with substance abuse issues. Although Tanya completed high school with good grades, she was known by her teachers as being impulsive and reckless. Despite these issues of self-control, Tanya has been able to find jobs in the past. An intake assessment at the jail identified her as having a mood disorder, for which she was provided medication. While incarcerated, she was given a work assignment and expressed interest in pursuing employment upon release. She plans to return to the same living arrangement with her boyfriend after her return to the community.

Step 1: Assess Risk and Needs: Upon release, Tanya met with her probation officer, who conducted a risk/needs assessment and reviewed the jail assessments. Because of Tanya's antisocial associates, criminal history, and indications of antisocial personality patterns (e.g., anger and low self-control), she is considered at high risk of reoffending. Her mental health issues are a responsivity concern because, untreated, her mood disorder may keep Tanya from being able to benefit from services, concentrate, or retain long-term employment.

Step 2: Assess Job Readiness: Tanya's probation officer makes an intake appointment with a local employment service provider that can assist Tanya with finding a job. At the appointment, Tanya is assigned a job coach, who contacts the probation officer for Tanya's risk-assessment information in accordance with the waiver Tanya has signed. The job coach conducts a more comprehensive job-readiness assessment, and determines that Tanya is relatively job ready.

Step 3: Deliver Targeted Services: Tanya's profile is consistent with a Group 3 designation. Some of the actions and interventions for Tanya might include the following:

» Tanya is referred by her probation officer to a mental health service provider upon release to ensure she continues her medication and receives treatment for her disorder so that it does not interfere with her ability to participate in reentry programming. The mental health service provider is an active member of the local reentry council and requests that the probation officer provide Tanya's risk/needs assessment information, which is permitted by the waiver Tanya had signed. Given Tanya's risk profile, the mental health treatment plan incorporates strong cognitive behavioral elements to address antisocial thinking and behavior. It is also designed to help Tanya consider the effects of her living situation and to create more prosocial support networks.[*]

» Tanya receives intensive job-coaching and development services. She meets frequently with her coach to work on job applications and prepare for interviews and also meets twice a week with a group of peers that is moderated by job coaches in order to discuss the challenges of reentering the workforce. These meetings

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[*] Mental health service providers are increasingly aware of criminogenic risks and the need to provide interventions to address these needs. Fred Osher, et al., *Adults with Behavioral Health Needs under Correctional Supervision: A Shared Framework for Reducing Recidivism and Promoting Recovery* (New York: Council of State Governments Justice Center, 2012). In communities where there is inadequate mental health service capacity, other partners may need to use trained personnel to provide cognitive behavioral therapy interventions to address criminogenic needs.

incorporate social learning techniques, as the job coaches and participants model and practice prosocial behaviors that will help with job retention.

» Tanya is also enrolled in a certification program, funded by the employment service provider, for an office administration position. The program meets twice a week at the local community college to structure more of her time, and to ensure that she can find a good job. The program also provides transportation assistance to ensure that she can make it to her classes.

» After Tanya is enrolled in these employment programs, her job coach touches base with her probation officer to ensure that meeting the conditions of her supervision will not interfere with her participation in this programming. The supervision officer agrees to schedule meetings during times when Tanya does not have class, and to change meeting times if they interfere with scheduled job interviews.

» While enrolled in the certification process, a job developer continues to search for a part-time job opportunity for Tanya that will provide more financial stability and structure the remainder of her time. After a month, Tanya secures a part-time job, and her employer is encouraged to contact the job coach and probation officer should any on-the-job issues arise. The job coach stays engaged with Tanya to ensure that she is able to complete her other program expectations (including her mental health treatment plan) while employed. Tanya receives a small financial award from the employment service provider for each month that she is employed, as well as for completing her service requirements, in order to incentivize continued engagement in her programs.

» The combination of mental health treatment, medication management, and cognitive behavioral interventions has helped Tanya manage her mood disorder and improve her attitude toward others. As Tanya begins to save her money, she is encouraged by her probation officer to think about changing her living situation.

» Six weeks after her release, as Tanya nears completion of her credentialing program, her job coach begins helping her search for full-time employment opportunities. The job coach helps Tanya update her resume to reflect her part-time work and new credential, and the job developer reaches out to local employers to find job opportunities and tout the employment program's support services as a hiring incentive. After eight weeks and numerous applications and interviews, a local company hires Tanya as a full-time office assistant, and the employment program acknowledges her accomplishments at a special event for program participants. The job coach remains in contact with Tanya for three additional months after her placement to ensure the transition goes well and she has the support she needs to succeed.

Groups 1 and 2: The Lower-Risk Groups

Lower Risk/
More Ready
(GROUP 1)

Lower Risk/
Less Ready
(GROUP 2)

Groups 1 and 2 are composed of individuals who are at a lower risk of recidivating, but have different levels of job readiness. Given their lower risk levels, Groups 1 and 2 have less of a need for, and are less likely to benefit from, placement in programs that are specifically designed to reduce risk factors related to criminal activity. Groups 3 and 4 should receive priority placements into these interventions instead.

Because Groups 1 and 2 are both low risk, the service-delivery principles associated with recidivism reduction will look very similar, but the program components that address job readiness will differ. Generally, Group 2 individuals should receive priority placements into job-readiness services. Group 1 is more likely to be successful with less-intensive programs and will benefit most from placements into job-retention services or self-directed programs.

Employment Program Components for Groups 1 and 2

Promote Job Readiness

Although Group 2 will benefit from job-readiness, placement, and retention program components, the intensity of service provision should be much lower than it would be for Groups 3 and 4. For instance, job-matching services could be provided on a once-a-week or monthly basis and be largely self-directed. Where there are limited resources, Group 2 should be referred to non-corrections-funded programs for education and training that are available in the community, as there will not be a risk-reduction value associated with the provision of job-preparation services, and there may even be adverse effects from putting them in the same program as high-risk individuals.

Group 1 individuals are the lowest-priority group for receiving more costly employment resources or risk-reduction services, both because of their low-risk levels and higher levels of job readiness. While non-skill-related barriers should be addressed upon release as needed, Group 1 individuals should not be placed in limited slots in more resource-intensive job-readiness programming.

Find and Retain Employment

Groups 1 and 2 may benefit from assistance with connecting to the labor market, but again, the intensity of service delivery for these individuals should be low. For instance, job-matching services such as resume writing, job searches, and interview practice could be provided on a once-a-week or monthly basis and also be largely self-directed. This is in stark contrast to the much more frequent and intensive job-matching services that would be delivered to Groups 3 or 4. These differences in the intensity of service delivery can significantly alter the costs of programs and their appropriateness for higher- versus lower-risk individuals.

Job retention is critical for developing a stable employment history and earning higher wages, and yet it is one of the greatest challenges in workforce development. As such, job retention and advancement is an appropriate program component to provide to Groups 1 and 2 following placement. As is the case for other programming for these groups, the intensity of follow-up service delivery should be low.

Service-Delivery Principles for Groups 1 and 2

Engagement:

Engagement for Groups 1 and 2 does not need to be as rigorous as for Groups 3 and 4. Service providers should not meet with individuals as frequently or place individuals in program components with intensive supervision. Corrections officers should deprioritize supervision resources for these groups by reducing the intensity of their engagement as well. It is also important to minimize these groups' exposure in programming to high-risk individuals that could serve as negative influences.

Timing:

Because Groups 1 and 2 are at lower risk for recidivating, service providers do not need to be as concerned with immediately addressing needs that are associated with reoffending. Over time, however, it is still important to adapt services to these individuals' changing needs. For instance, Group 2 should be transitioned into employment program components that will lead to workforce opportunities as job readiness improves.

Incentives:

Groups 1 and 2 should be encouraged to participate in appropriate programming through the use of motivational communication techniques. Where there are limited resources, financial incentives should be prioritized for Groups 3 and 4 if recidivism-reduction goals are to be considered in addition to improving individuals' employability.

Coordination:

Employment professionals should coordinate with supervising officers to ensure that the necessary and appropriate referrals are made to public and private community treatment and service providers. For Group 2, it is also appropriate to make referrals to employment services that typically respond to the general hard-to-employ population (although both the individuals with criminal histories as well as employment agency staff may need guidance on disclosing a criminal record, addressing employer resistance, and finding jobs that are not legally barred for people with their type of criminal record). Probation or parole supervision and reporting conditions should be structured to minimize disruption of prosocial activities and networks. Officers should use graduated sanctions, when possible, that also reduce the likelihood for probation and parole revocations for violations of supervision conditions (such as a substance abuse relapse). Here, too, there should be communication among corrections, employment, and other reentry service providers as needed, but comprehensive integration of complex responses should be less of an issue.

Structured Time:

Structured time spent in programs targeting job-preparation needs should not interfere with the participants' ability to reintegrate with his or her permanent support network (i.e., their families and communities). As such, even if someone in Group 2 could benefit from job-readiness programming, the actual hours spent in that program should not be too high. Although efforts should be made to encourage positive social connections, there is less need to structure the majority of individuals' time spent outside of employment programming for Groups 1 and 2.

Case Example (Group 2):

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Lower Risk/
Less Ready
(GROUP 2)
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Joseph is 32 years old and serving 18 months on probation for forging checks at a time when he was experiencing severe financial problems. He had no prior criminal history. Joseph is required to seek out employment as a condition of his probation, but has yet to find a job. He has a high school diploma, but has struggled with diabetes through the majority of his adult life, which when untreated has interfered with his ability to maintain steady employment or develop workplace skills. As a result, he has had limited exposure to professional settings. Joseph lives with family and has stable housing.

Step 1: Assess Risk and Needs: Joseph was assessed pretrial as low risk because of his stable family and housing situation, lack of criminal history, and otherwise prosocial attitude and remorse for how his actions affected the victims of his crimes. His probation officer reassesses Joseph's risk and needs at the start of probation and determines that his low-risk rating is still applicable. His physical health has been determined to be a responsivity issue.

Step 2: Assess Job Readiness: Joseph's probation officer refers him to the local employment service provider for job placement assistance. He is given a job-readiness assessment upon arrival and deemed not job ready because of his limited employment history. When asked about his interests and future plans, Joseph expresses a desire to explore long-term options in the manufacturing industry. The employment service provider also contacts Joseph's probation officer for his risk/needs assessment information. To help Joseph address and better manage his health issues, the employment service provider is given access to his health information through a signed consent form.

Step 3: Deliver Targeted Services: Joseph's profile is consistent with a Group 2 designation. Some of the actions and interventions for Joseph might include the following:

» Joseph's probation officer ensures that check-ins do not interfere with employment activities and refers Joseph to a clinic that provides health care to indigent persons so that he can start a medication regimen to manage his diabetes.

» Because Joseph is at low risk for future criminal activity, the employment service provider connects Joseph with a job-preparation program administered by the local American Job Center that meets once a week and works on basic soft-skill development. The center also enrolls Joseph in a financial management class to ensure he avoids the problems that led to his criminal conviction. Finally, he is provided a scholarship-style grant[*] to participate in a certification course for forklift operations at a local community college.

» Joseph is also assigned a job coach who helps him write a resume and sample cover letter, and a job developer who identifies jobs that do not have legal barriers and fit Joseph's skill level. The job developer matches Joseph to an entry-level position at a warehouse. Once Joseph completes his certification, the job developer

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[*] American Job Centers can use WIA, Transitional Assistance for Needy Families (TANF), and other federal and state funding sources to set up different services to meet the needs of their clients. Grants for education and training opportunities are fairly common, but the availability of these types of services may vary from jurisdiction to jurisdiction.

and coach help him pursue a more advanced position at the warehouse that fits his new credentials.

» Joseph's job coach stays in contact with Joseph for six months after placement in the warehouse position to help with any on-the-job issues and encourage job retention. Joseph is acknowledged at regular events for program participants as long as he remains employed.

Case Example (Group 1):

| Lower Risk/ More Ready **(GROUP 1)** |

Maria is in her late 20s and was convicted of driving under the influence when leaving her 10-year high school reunion. Because this was Maria's first criminal offense and she was remorseful during the trial, she was sentenced to six months of probation during which time her license would be suspended. She is also required to complete a program for individuals convicted of DWI. As a result of losing her license, she also lost her job as a local delivery truck driver. Maria has a high school diploma and two years of community college, as well as a strong employment history. She has a stable group of friends who have not had trouble with the law and she has lived in the same apartment for several years. Maria tends to drink moderately in the evenings and on weekends; previously her drinking did not affect her ability to hold down a job.

Step 1: Assess Risk and Needs: Maria's probation officer assesses Maria as being at low risk for reoffending given her limited offense history, lack of antisocial thinking, stable living situation, and strong social network. The pretrial assessment concluded that Maria's substance use did not meet criteria for a substance use disorder and addiction treatment would not be necessary.

Step 2: Assess Job Readiness: Maria's previous job required her to drive in the course of her duties, so she turns to her local American Job Center for assistance finding a job that lacks this requirement and is accessible through public transportation until her license is reinstated. At that time, she would like to be able to drive to work, but does not want to continue doing delivery services. The American Job Center assesses Maria as job ready.

Step 3: Deliver Targeted Services: Maria's profile is consistent with a Group 1 designation. Some of the actions and interventions for Maria may include the following:

» Maria is given access to the American Job Center's core job-search services and given assistance with completing job applications as needed.

» Maria's defense attorney files an appeal with supportive testimony from her probation officer to encourage the judge to reinstate Maria's license for limited use of her vehicle only to get to and from work. The judge agrees as long as an alcohol detection device is installed and her travel is restricted to work and other necessary places.

» Maria is able to find a job, and continues to use the American Job Center on an as-needed basis to pursue advancement opportunities.

KEY TAKEAWAYS FROM SECTION III

1. The resource-allocation and service-matching tool can help employment, reentry, and corrections professionals improve outcomes for their shared population. Policymakers and administrators can use the tool to better determine whether their resources are being used to their best effect and practitioners can help ensure that the right people get the right interventions at the right time, and in ways that reduce their chances for reincarceration.

2. There are four groupings that result from criminogenic risk/needs and job-readiness assessments of unemployed individuals released from prison or jail or starting probation or parole. These groupings can be tied to a combination of corrections and supervision policies, employment program components, and service-delivery strategies aimed at reducing recidivism. Line-level staff can then individualize plans to meet the diverse needs of individuals within each grouping.

3. Using assessment data and cut-off scores to define the size of the four groupings and then determining the available service/supervision slots, system administrators can better decide whether resources should be developed or reallocated (such as when analyses reveal that lower-risk/more job-ready individuals are taking up spaces in programs that they do not need to succeed).

4. Although workforce development agencies already invest in employment interventions for people with criminal histories that come through their doors, they are often not oriented to identify higher-risk individuals and provide them with the type of intensive, specialized programming required to keep them out of prison and jail and connected to the workforce. The tool is meant to help jurisdictions narrow the population to be targeted for intensive services and leverage their collective resources through multisystem collaboration, cross-training, and planning to reduce individuals' criminogenic risk factors that affect employability. By applying certain service-delivery principles to traditional employment interventions, service providers can make better use of existing employment resources in the community to reduce recidivism.

5. The examples provided in this section primarily combine existing system responses for each of the four groupings, but it is hoped that through coordinated multidisciplinary planning, new integrated responses will be envisioned by corrections, reentry, and employment professionals that make the most efficient and effective use of their collective resources.

CONCLUSION

THE STRENGTH OF THE RESOURCE-ALLOCATION AND SERVICE-MATCHING TOOL is its integration of effective principles and strategies from both the employment and corrections systems. Clearly, there is much that each system can learn from the other. Employment professionals can take advantage of strategies that have proven effective for successful reentry, while corrections leaders and practitioners can improve outcomes for individuals with criminal histories by considering job-readiness strategies. The proposed tool provides a common starting point for policymakers and administrators to determine how their resources are best spent to achieve workforce and recidivism-reduction goals. Whether the tool and the principles have value and can be implemented effectively will be determined largely by the willingness of practitioners in the reentry, corrections, and employment fields to explore the many issues raised in this white paper and to test its approaches. It is hoped that the following benefits will result from such discussions and encourage both innovation and experimentation.

- **Making the Most of Limited Resources**

  The tool should not be seen as a means to do more with less—rather, it is meant to facilitate discussions about how resources can be used most efficiently to improve employment and reentry outcomes. The reality is that most jurisdictions simply cannot afford to give intensive services and supervision to everyone reentering the community from prison or jail, or to those who are on probation and parole.

  Workforce service providers that are already seeing large numbers of individuals leaving corrections facilities or who are on community supervision can take advantage of existing corrections assessments to more effectively triage and sequence their services. Risk/needs and job-readiness assessments can provide workforce service providers with information on the problems that individuals have that, if unaddressed, affect their ability to benefit from services. The application of RNR principles is especially important for employment providers serving large numbers of people with criminal histories, as many of the same characteristics that lead to reoffending can also affect whether they will be able to successfully connect with the labor force. These assessments provide information necessary for maximizing limited services, by helping both workforce professionals and corrections professionals match the right people with the right services, and ensure that services and programs are sequenced in such a way that they encourage growth and change in the program participants.

  Concentrating intensive resources on fewer individuals, and sequencing services properly, can have a far greater impact than trying to provide the most basic assistance to everyone.

- **Focusing Efforts on Programming with the Greatest Impact**

  The pressure on administrators and practitioners to show that their efforts are having their intended impact could not be greater. The recommendations in this paper may require some employment, corrections, and reentry programs and agencies to discuss reorienting their services to address the more complex needs of less job-ready individuals if they hope to improve outcomes for individuals with criminal histories. This may require adding capacity for specific evidence-based services, which might be funded by redirecting resources that were being used to provide more intensive services to individuals with lower levels of risk and needs that may actually succeed with less expensive and intense options. Integrated planning and responses envisioned by the resource-allocation and service-matching tool can also help ensure that program investments yield high returns. This white paper's recommended assessment-driven strategies reflect expert advisors' belief that approaches need to be flexible and tailored to individuals' changing needs over time to be effective.

- **Expanding the Use of Objective, Validated Tools to Reduce Recidivism and Provide Continuity of Care**

  There is no clearer message in this white paper than the need for validated assessments to inform decision making for behind-the-bars programming, community supervision, and reentry planning—including employment services. As a growing number of corrections professionals and researchers can attest, using validated assessments can help ensure that those individuals returning to the community with the greatest risk for reincarceration are matched to intensive supervision and service slots. These assessments can also shed light on responsivity factors that may affect an individual's ability to succeed in employment and other community programming.

  By expanding the use of these tools and sharing risk and needs assessment information with community-based service providers, in accordance with all legal mandates, corrections professionals can help facilitate continuity of care for individuals. Gains and investments made in programs during incarceration will not be lost at the time of reentry if they can be reinforced or continued in the community. Corrections practitioners have an opportunity to initiate this unbroken chain of coordinated recidivism-reduction interventions.

  Ultimately, the type of coordinated approach proposed in this paper can help ensure that probation and parole supervision and employment training/readiness activities are leveraged and complement one another, and can further the education, training, behavioral health, and other work that has occurred during incarceration so that neither system's efforts are undermined by the other.

- **Addressing Barriers to Implementation**

  This paper provides a basic understanding of the barriers to implementing the resource-allocation and service-matching tool and is meant to stimulate cross-systems discussions

addressing policies and practices that are inconsistent with RNR principles. For instance, corrections administrators may need to work more closely with judges to ensure that sentencing mandates do not result in limited intensive substance abuse treatment slots being filled with low-risk, low-need individuals. The discussion on RNR and promising employment practices helps highlight the importance of prioritizing high-risk/high-need individuals in behavioral health programs so that they can be ready for employment services and job placements. It may also be necessary to raise awareness about the need to prioritize the most intensive behind-the-bars treatment and programming for inmates posing the highest risk of reoffending and who have the greatest needs. (This prioritization does not affect the constitutional protections afforded all inmates for necessary health care.)

Community supervision agencies also have a role in ensuring that RNR principles are followed. Probation and parole agencies are increasingly applying RNR principles by using differential responses based on risk, and ensuring that supervisees' reporting requirements and other mandated programs do not interfere with job training and placement. Moreover, when individuals must look for employment or be placed in a job as a condition of their release or supervision, officers often have discretion about revocations and reincarceration. While revocation is usually made when other failures or violations occur (such as repeatedly failing drug tests), it is important to give full consideration instead to investing in finding structured, stabilizing employment or placement in more intensive treatment services that can put the individual on a path to successful reentry.

Finally, employment and reentry professionals may need to work with policymakers to address funding streams, program-evaluation criteria, and other factors that can complicate service providers' efforts to work effectively with individuals with criminal histories.

• Breaking the Cycle of Reincarceration and Strengthening Communities

The tool provides a platform to discuss the role of employment service providers in not only enhancing job placement and retention for people with criminal histories, but potentially to increase public safety. Similarly, corrections professionals can better use employment interventions to address risk-related challenges. This paper makes clear that corrections, reentry, and employment service providers have a vested interest in helping individuals with criminal histories succeed in the community.

Because individuals leaving prison have stressed the importance of having a job in order to avoid criminal activity, employment providers are in a special position to support these individuals and help them become contributing members of their families and communities. Employment service providers can work with other reentry partners to structure individuals' time in constructive ways with prosocial peers and address treatment needs that can also help reduce the likelihood of reoffending. And because the majority of people leaving prison and jail return to a disproportionately high number of neighborhoods already facing poverty, high unemployment, and high crime rates, there are clear benefits to the community when returning individuals' time is spent in legitimate employment.

In some ways, the proposed resource-allocation and service-matching tool is quite intuitive. Where the tool's impact will be felt most is in how resources are reinvested and the extent to which service matching will be better tailored to individuals' needs associated with the risk of criminal activity and job readiness.

The prospect of sharing valid assessment information and repeatedly reassessing or realigning community capacity for responding to the areas where there is greatest need is a daunting task. And although the tool is based on well-researched principles, at this writing, it has not been tested in jurisdictions as a planning tool to determine its utility for resource allocation and service matching at the individual level. Although many of the recommendations and components outlined in this document have been tested as parts of a particular program, the tool and its underlying principles have not yet been used to completely design or redesign an employment and reentry program.

The CSG Justice Center and its partners plan to test recommendations from this white paper to begin determining how the tool can support policymaking, program design, and service delivery. One or more sites will be selected to apply the tool's principles to improve resource allocation and service matching in order to advance positive job readiness and reentry outcomes for individuals with criminal histories.[*] Ultimately, it is hoped that policymakers and administrators will find the tool and related resources useful in better supporting the work of all front-line agency personnel and community-based service providers committed to building a strong workforce and to the safe and successful reintegration of individuals with criminal histories in our communities.

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[*] Information about implementing the recommendations in this paper and other resources related to this project will be made available at csgjusticecenter.org/the-reentry-and-employment-project. The testing phase of this project will also be used to develop a suite of technical assistance tools to help policymakers, program administrators, and practitioners interested in improving outcomes for unemployed individuals with criminal histories.

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JUSTICE ★ CENTER
THE COUNCIL OF STATE GOVERNMENTS

Sustaining Effective Practices: Habits of Mind

"Sustainability is the capacity of a system to engage in the complexities of continuous improvement consistent with deep values of human purpose" (Fullan, 2005, p. ix)

"Until I learned about Habits of Mind, I was a thug." (Community High School student)

On a Friday in October, five students marched in single file to *Pomp and Circumstance* and took seats facing the audience. The ceremony featured congratulatory remarks and encouraging speeches about bright futures. But this was no ordinary graduation. The students ranged in age from 25 to 45. Their caps and gowns covered cropped hair and khaki uniforms. At the ceremony, each graduate spoke, offering appreciation to the faculty, staff, and other inmates who had supported the journey toward a high school diploma. Many of the speeches made reference to the *Habits of Mind* that had made the journey possible - especially: 1) persistence; 2) managing impulsivity; 3) finding humor; and 4) thinking interdependently. It was an occasion that inspired wonderment and awe.

The story of *Habits of Mind* at the Community High School of Vermont is the story of an innovation that has made a difference and has endured against monumental odds. Community High School was established to serve the students who public schools have most failed: inmates and parolees of the Corrections system. In Vermont, as in other states, the primary mission of Corrections is safety, security, and control. Yet at Community High School, designed for incarcerated men and women without a high school diploma, staff and inmates have been teaching and learning about *Habits of Mind* (see Table 1) since 2004, and this innovation continues to evolve and thrive, despite the sunsetting of initial grant resources.

<u>Table 1 about here</u>

Founded in 1984, Community High School became (in 2003) the first, and may still be the only, accredited high school within the U.S. correctional system. The high school

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encompasses seventeen sites throughout the state with campuses located in all eight correctional facilities, and at nine community probation and parole offices. Inmates are able to maintain their high school program where ever they are placed within the corrections system, but the way that program is delivered is different across sites, ranging from individual instruction at the smaller community-based sites, to classroom instruction over time in the prison facilities.

Teaching and Learning about Habits of Mind: A Common Vocabulary

For each Community High School student the curriculum is based on an individualized plan leading to a diploma. What is unique about this school is that *Habits of Mind* are embedded as a unifying language for describing, teaching and modeling positive behavior, in high school classes, in the vocational industries environment of the corrections system, and to some extent in the living units of the prisons.   Students (inmates) and staff, as a regular practice, complete comment slips that identify a particular habit that was used appropriately, wherever in the day it might have occurred. These comments show that students are transferring their use of the habits from the classroom or work-site into life.   On *striving for accuracy*, Ronnie recalled: " I couldn't get the weld to take, it kept splitting on me. I wouldn't give up and wanted to make sure the weld was good enough for Jerry's inspection. I ended up welding several pieces until I finally got the weld right." A teacher wrote: "Brian is in my Parenting class and he said that parenting is *thinking flexibly*. He said, 'You have this agenda of things to do during visits with your child, but you have stuff happen with kids all the time that forces you to think flexibly with your child.' " Jason observed an instance of *thinking flexibly* and said: "While I was waiting for the phone, I witnessed Justin control his anger over the phone when talking to someone. He used to yell and smash the phone down. This time he looked for alternatives to handle his anger by saying he wasn't fighting and he would call back after he calmed down."

Community High School classes start around 8:00AM and run until early evening. Although each campus is different, on a typical day students attend a tight schedule of academic and vocational classes, criminal thinking reduction groups, and case management meetings. During classes and meetings student/inmates learn content along with the 16 *Habits of Mind*. Academic subjects are "chunked" into short learning modules, not only to organize the learning, but also to allow students to experience frequent success. Teachers strive for a balance among hands-on learning, modeling, and direct instruction. The goal, no matter the context or content, is to get the students applying their learning quickly. The faculty and the vocational industries staff strive to make sure that teaching and learning are relevant, problem-centered, and internally motivating. But even more importantly, the students are exposed to the same vocabulary in all aspects of their prison experience to describe the behaviors that are effective in achieving goals, rather than being reprimanded for the behaviors that got them into the prison in the first place.

Using grant funds to get started, the evaluation of the *Habits of Mind* program showed positive change after three years, in terms of the inmates' acquisition of the *Habits*, improvement of the organizational culture, increase in employment after release, and reduction in recidivism. (See Table 2).

<center>Table 2 about here</center>

The employment statistics, recidivism rates, and anecdotal evidence suggest that *Habits* can enable the most recalcitrant students to take control of their lives.

Since that time, *Habits of Mind* in this high school has grown, evolved, and continues to be integral to educational and vocational programs. How has it been possible for this school to sustain such a significant transformational change over time? In *Leadership & Sustainability: Systems Thinkers in Action,* Michael Fullan (2005) noted that sustainability remains "the

ultimate, adaptive challenge."

> An adaptive challenge is a problem for which solutions lie outside the current way of operating. We can distinguish technical problems, which are amenable to current expertise, from adaptive problems, which are not (Heifetz in Fullan, 2005).

Fullan proposed Eight Elements of Sustainability (see sidebar) as a solution for this adaptive challenge. The sustained transformation of Community High School, described through the lens of Fullan's eight elements, reveals much about what it takes to sustain substantive high school innovation.

Public Service with a Moral Purpose (Sustainability Element #1)

While the very establishment of a high school, within the VT correctional system, was a huge accomplishment, an academic high school curriculum was not, in itself, sufficient. Community High School had a broader moral purpose: enabling inmates to lead successful, productive lives upon release from prison - and achieving it requires some sweeping changes in students' behavior. As former Commissioner of Corrections John Gorczyk explains:

> The research is clear: If you want to change behavior, you need to provide a minimum of 4 to 1 (ideally 12 to 1) positive to negative reinforcements. The negative behaviors are easy to spot--you respond to them. But positive behaviors had generally not been articulated in a clear way. It was hard for corrections staff to know what to positively reinforce except the the obvious things like you got a good score on a test.

Gorczyk, and school superintendent Bob Lucenti, were determined to create a cohesive system that would focus on changing inmate behaviors through the teaching of positive, desired behaviors in all aspects of inmates' experience within the prison: the living units, vocational programs, and the school. Staff across the organization acknowledged the need, supported by research, for a common language that would enable inmates and staff to focus on positive, behaviors. The 16 *Habits of Mind* described by Costa and Kallick (2000) seemed to meet that need, and implementing them became the focus of the

successful grant application in 2003 that helped launch the innovation.

Commitment to Changing Context at All Levels (Sustainability Element #2)

After three years of development, that emphasis on the *Habits* began to have far-reaching effects on inmates and on the organization as shown in Table 2. Faculty, case workers, correctional officers, and staff who directed inmate industries work were all trained in *Habits of Mind*, so that they would share the common vocabulary and model the behaviors they were promoting. The idea was to create a culture of learning, with *Habits of Mind* as the centerpiece and foundation. Training sessions that used *Habits of Mind* as a common language began to break down "silos" in the organization, among the staff in the three sites where the *Habits of Mind* work was focused.   Because program leaders were determined that Community High School students would have sufficient experience with the *Habits of Mind* curriculum for it to make a difference, the program even forced a change in systems that determined where inmates were placed and how their days were scheduled. The *Habits of Mind* lens prompted administration and staff to examine values, language, and even governance structures.

By 2007, the groundwork for sustainability had been laid, at least in the facilities that were included in the grant, where *Habits of Mind* had been infused. Yet even with the sunsetting of grant funds, the success of *Habits of Mind* in making a difference for inmates meant that many staff continued to "use" it. Corrections leaders who had been involved in the grant-funded work were solid advocates for the innovation. They continued to promote the work that they had started and expected central office leadership to support them. The newly appointed school superintendent recognized early on that *Habits of Mind* could become the "glue" - the framework for further development of Community High School across all 17 of its sites, and she set out to establish a team that would be able to accomplish this by building on what had already been

started.

Lateral Capacity Building through Networks (Sustainability Element #3)

As the Community High School leadership team began to design systems that would support and sustain *Habits of Mind* over time, using *Learning and Leading with Habits of Mind* (2008) as the common text for all staff, they recognized the importance of capacity building - of supporting faculty learning and authority in designing specific *Habits of Mind* instructional practices, that would suit their particular contexts. A key piece of this capacity building has been to support networking among the sites. Staff have ongoing opportunities to work together, across sites, to learn more about successful approaches to implementing *Habits of Mind* in their particular contexts.

Networking includes both Community High School faculty and vocational staff, and inroads into the work of the corrections officers, as well as the treatment program staff, are being made both at the leadership level through joint planning, and at the program level through shared professional development. Monthly staff meeting agendas and protocols include opportunities for staff across the sites to discuss and share what has been effective and not so effective in their practice. An early version of a *Habits of Mind* Tool-Kit available on the school website allows teachers to build on and use each other's work.

Even the Community High School process for hiring new staff builds capacity. Search committees are comprised of administrators and faculty, who ask candidates to review the list of *Habits of Mind* and to explain which two or three they would integrate into the subject area curriculum to encourage deeper thinking. Many candidates now come to the interview having researched the *Habits* after seeing the school website and information.

Intelligent Accountability and Vertical Relationships (Sustainability Element #4)

Sustainable societies must solve (hold in dynamic "tension") the perennial

change problem of how to get both local ownership (including capacity) and external accountability, and to get this in the entire system….Too much intrusion de-motivates people; too little permits drift, or worse. (Fullan, 2005, pp.19-20)

Today, members of the Community High School collaborative leadership team (Dana Lesperance, Career and Technical Education Chief, Troy McAllister, Chief of Corrections Education, Wilhelmina Picard, Superintendent of Educational Services) understand the importance of clarity about what to be "loose" about, and what to be "tight" about, in relation to the *Habits of Mind* effort. They know that aligning all systems within the organization ("connecting the dots") is essential to creating coherence and reducing fragmentation. They also understand the power of providing materials that build the self-evaluation capacity of each of the Community High School sites. Over the past four years, the systems alignment elements they have put in place include:

- the development of a Community High School "*Rosetta Stone*" that serves to connect various standards and expectations, including the Common Core, 21st Century skills, and *Habits of Mind*;
- the establishment of a *Curriculum Framework* that shows *Habits of Mind* not as a "stand-alone" course, but as standards for learning that need to be embedded across the whole curriculum;
- the development of an *Employee Handbook* that establishes the expectation that *Habits of Mind* are as important to faculty practice as they are for students;
- the requirement that teachers include Habits of Mind as some of the criteria used in *grade books* that are now a part of the new student information management system. This is an effort to ensure that *Habits of Mind* are required in every class and hopefully will begin to be seen in students' reflections, journals, and other artifacts as part of the assessment process;
- the establishment of *"Seven Principles"* that are broad, non-negotiable strategies for integrating *Habits of Mind* into all Community High School sites;
- the establishment of "MAGIC" (Making Academic Goals and Introducing Community), a required seminar for all new students, that introduces them to Community High School and to *Habits of Mind*;
- the establishment of an Educational Support Team (EST) process across

all sites that incorporates *Habits of Mind*;
- the development of a *Graduation Portfolio* as a requirement for Community High School graduation, which includes required demonstration of *Habits of Mind*, and asks students to identify which *Habits* serve them best in the areas of living, learning and working.

These system alignments constitute the framework for external accountability, yet each Community High School site develops and implements a unique *Habits of Mind* action plan. While those plans have similarities, the specifics of the plans are shaped by the particular context of each site.

Deep Learning (Sustainability Element #5)

"Deep Learning" describes a learning community that allows and especially encourages risk taking and using mistakes as opportunities. Fullen explains it this way: "...the point is to not fail stupidly (you are not allowed to keep making the same mistake) but to fail intelligently (forgive and remember)." A culture in which deep learning is valued is rich in reflection and humor, and collects and uses quantitative and qualitative data to improve the learning experiences of and for students.

Community High School certainly has used the data collected in the 2007 program evaluation, both to advocate for continuation of what has worked, and to let go of what currently seems insurmountable. More importantly, the practice of collecting short reflections from students and staff that identify and celebrate the use of a *Habit*, provides frequent evidence of their importance. Clovis reflects on *striving for accuracy*: " Over and over again and again to make sure everything I do is right in Lit, writing, computer, history. It's never ending and sometimes it seems that way but the more I push, the better it gets so onward and forward and *strive for accuracy*." Jose's description of *striving for accuracy,* also is indicative of *persistence:* [I] never quit or gave up on the problem. I continued to get it wrong but I stayed focused and

finally learned how to raise fractions to higher terms."

A teacher wrote this about *thinking flexibly*: "David wrote a journal entry and read it aloud to the class. In his entry, David apologized for making fun of another student and wrote a beautiful blessing for the other student's health and well being." David wrote his own reflection of this same event saying: "I wrote a letter to Robert from my heart and it made me and him very happy. So mine and his lives got better."

In addition to using these reflections for motivation and recognition, which may be enough, a next step Community High School may take will be to use them for a deeper learning purpose in terms of providing assessment data, categorizing and annotating the reflections as a form of curriculum and instruction review. They could answer such questions as: What *Habits* are recognized and how? Which do not seem to be used? Do the reflections show a good understanding of the *Habit* identified? Is there information that suggests that something different or more needs to be done?

Dual Commitment to Short Term and Long Term Results (Sustainability Element #6)

When Community High School began its work with *Habits of Mind*, the effort was designed to show short-term results: the work focused on just three of the 17 sites, and the evaluation of the effort, after only three years, showed significant positive results. Those short term results laid the groundwork for investment in broader system change, not just in the other Community High School sites, but also in the vocational/industries parts of the corrections system. That longer term systems change may eventually extend to all of the living units sections of the corrections system. For now, Community High School's leadership team focuses on building the capacity of staff at each of its educational and vocational sites, understanding that the innovation will have even stronger positive effects when it is infused throughout the

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organization.

Cyclical Energizing (Sustainability Element #7)

From the very beginning of the *Habits of Mind* work at Community High School, the

school's leaders had sustainability in mind, and understood the key role that cycles of energy

renewal play in keeping innovation alive and thriving. As John Gorczyk (2013) noted:

> We did a lot of thinking and planning based on creating a culture that
> would endure. When you look at the elements of culture, and how a
> culture is maintained, and you look at cultures that have sustained over
> time, you find these elements:
> - Shared purpose/values;
> - Shared language/vocabulary
> - Shared governance structures (roles, relationships, decision making
>   process);
> - Sanctions (positive and negative);
> - Education (teaching new people); and
> - Ritual and Ceremony
>
> These are the elements we tried to build into our implementation plan.

However, after energy that came from grant resources began to dwindle, and the few

champions remaining were feeling isolated, the Community High School leadership team made

the decision to invest in a *Habits of Mind* "event" that would bring recognition to the

Department of Corrections, and establish a liaison with the larger educational community in

Vermont. Community High School contacted Art Costa and Bena Kallick, (the authors of the

Habits of Mind framework), and started a dialogue that continues to this day. One initial step

was to hold a statewide conference that featured Costa and Kallick. Attendance at the

conference was required for all Corrections educational and vocational personnel, and was open

to Corrections Officers as well. Community High School also invited other public school

educators and human service personnel to attend. The conference created a public context, and

garnered support for the continuation of the *Habits of Mind* work at Community High School. It

also marked the beginning of an on-going relationship between Community High School and the

Institute for *Habits of Mind* - a relationship that includes multiple follow-up training sessions and continued face to face, online, and phone coaching and consultation with the Community High School administrative team. These exchanges, are structured around questions generated by the Community High School leadership team and questions raised by Institute consultants.

Institute for Habits of Mind consultants to Community High School state that they often learn as much as they offer in coaching sessions. The nature of a professional learning community is that all are learners, and perhaps that is one of the reasons why this relationship continues to be effective. The current Community High School administrators are quick to acknowledge the significance of the decision to invest in intense, ongoing, high quality professional development for all the educational and vocational staff and for themselves.

Ritual and ceremony also serve to re-energize students and staff. The monthly recognition of the *Habit of Mind* Student of the Month at several of the prison facilities is one such example. The showcasing of inmates' *Habits of Mind* projects is another. Anyone entering the Northern facility is immediately aware of beautifully crafted wooden representations of the *Habits* that hang throughout the buildings, and there are paintings, and bulletin boards of writing - all student work that focuses, on the *Habits*. Graduation is an especially important ritual that renews both students and staff as students are encouraged to embrace *taking responsible risks* as they enter higher levels of the workforce; and where teachers, fellow inmates and the students themselves frequently refer to one or more of the *Habits* that have helped on the journey.

Another energy renewing approach occurs at monthly faculty meetings, which always feature *Habits of Mind* elements, often as a key agenda item, and always as explicitly modeled by meeting facilitators. Community High School leaders also pay

attention to energy renewal through their attention to systems: working on alignment of systems so that fragmentation does not sap energy, and taking time out to review and celebrate gains. They understand that a key to the future of *Habits* is to begin to see faculty leading these workshops.

The Long Lever of Leadership (Sustainability Element # 8)

Leading students to take control of their lives depends on attending to all eight sustainability elements. *Habits of Mind* as a foundational component of teaching and learning in the Vermont correctional system would never have endured without leaders willing and able to pay simultaneous attention to all eight elements. Today, Community High School leaders work as a team, at all levels of the system, sharing expertise, trading insights, and raising questions about the planning and implementation of *Habits of Mind* work. Their approach includes building the capacity of staff at each site to invent and carry out *Habits of Mind* curriculum and instruction that engages their students. As Institute for *Habits of Mind* consultant Michele DeBellis describes the work of the leadership team, she applauds their attention to conversation:

> They understand the importance of listening, by remaining very quiet, and then asking questions; and they are so willing to question what they, themselves, are doing - for example, about how *Habits of Mind* will relate to the math work that they are focusing on right now. *Habits of Mind* have become not just embedded in the curriculum for Community High School students; they have become an internal compass for the leadership team and the staff as well.

One challenge facing the Community High School leadership, involves developing new leaders in the organization, who can carry on the work after they have left. As Fullan (2005) noted:

Community High School will also need to develop stronger systems for collecting quantitative and qualitative data that can inform *Habits of Mind* practice. That data will not only

become a centerpiece for deep learning, but, as Bena Kallick notes, it will help ensure that

teaching and learning about the *Habits of Mind* becomes an evidence-based practice that new

leaders understand and value. With that evidence,

> ...as new leaders come into the organization the question will not be
> whether they'll support *Habits of Mind*, but rather, how can they can make
> *Habits of Mind* their own. They can be *creating, imagining, innovating*,
> and then crosswalk to l*istening with empathy*. These are critical habits for
> any new administrator to pay attention to in order to understand what is
> working in that culture." (Kallick, 2014)

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Table 1: Habits of Mind

Persisting	Thinking and Communicating with Clarity and Precision
Managing Impulsivity	Gathering Data through All Senses
Listening with Understanding and Empathy	Creating, Imagining, Innovating
Thinking Flexibly	Responding with Wonderment and Awe
Thinking about Thinking (Metacognition)	Taking Responsible Risks
Striving for Accuracy	Finding Humor
Questioning and Posing Problems	Thinking Interdependently
Applying Past Knowledge to New Situations	Remaining Open to Continuous Learning

Costa, Arthur L. and Kallick, Bena (2000) *Discovering and Exploring Habits of Mind.* Alexandria, VA: ASCD

Table 2: Evidence of Program Effectiveness

Indicators	Male Participants (# who completed 46)	Female Participants (# who completed 123)	Male Comparison Group	Female Comparison Group
Aquisition of *Habits of Mind*	93% increase	96% increase	73% increase	63% increase
Employment obtained within 30 days of release	91%	68%	64%	30%
Employment retention after release	95%	92%	64%	75%
Reincarceration	59%	38%	74%	63%

(Houston, 2009)

Eight Elements of Sustainability
Michael Fullan. <u>Leadership and Sustainability</u>. Corwin Press, 2005

1) Public service with a moral purpose: transcend the individual to become an organization and system in which collectives are committed to three aspects of moral purpose: a) raising the bar and closing the gap of student learning; b) treating people with demanding respect (moral purpose is supportive, responsive, and demanding, depending on the circumstances); and 3) altering the social environment (e.g., other schools and district) for the better. (p. 15)

2) Commitment to changing context at all levels: changing the whole system based on the notion that "context is everything". (p. 17)

3) Lateral capacity building through networks: Administrators and staff collaborate within and across schools and districts.

4) Intelligent accountability and vertical relationships: "Sustainable societies must solve (hold in dynamic 'tension') the perennial change problem of how to get both local ownership (including capacity) and external accountability." (p. 21)

5) Deep learning: requires driving out fear; setting up a system of transparent data-gathering coupled with mechanism for acting on the data; and, make sure *all* of the systems are expected to learn from their experiences. (p. 22)

6) Dual commitment to short- term and long- term results: Short term results are essential to building long term trust for long term investment.

7) Cyclical energizing: Paying attention to both over and under energy use "...combinations of full engagement with colleagues, along with less intensive activities that are associated with replenishment… Cyclical energizing is a powerful new idea. (p. 26-27)

8) The long lever of leadership: leadership at all levels must be engaged in putting the eight elements into practice. "...we need a system laced with leaders who are trained to think in bigger terms and to act in ways that affect larger parts of system as a whole: the new theoreticians." (p. 27)

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Correction Education Workforce Readiness Certification Process

THE IMPORTANCE OF WORKFORCE READINESS SKILLS

Workforce readiness skills are those that apply across a variety of jobs and life contexts. They are also known as key skills, core skills, workplace fundamentals, essential skills, key or workplace competencies, necessary skills, and transferrable skills. Regardless of what they are called, workforce readiness skills are those basic skills necessary for getting, keeping, and doing well on a job. They are generic in nature and cut across jobs, industry types, and occupational levels.
In order to be a productive citizen in the world of work, family, or community involvement, mastery of basic workforce readiness skills is essential for all Participants. The Workforce Readiness Certificate process is designed to address the skills and behaviors that are critical in the 21st century workplace.

The intent of the Workforce Readiness Certificate is to recognize a Participant's mastery of employability skills valued by employers, help Participants explore a career interest, and provide a credential of Participant mastery of workforce readiness skills. This process provides guidelines to help Participants, teachers, and school partners offer school-supervised work-based learning programs. Reinforcing Habits of Mind, 21st Century Skills, and Common Career Technical Core standards and behaviors into the competencies needed to be a success in the workplace is important to challenge our Participants to be at the forefront of industry expectations. Participating in this program will provide a valuable service to both Participants and the school community. Participants will get more out of their jobs than a paycheck. The corrections community will have employees whose work is more meaningful because it is connected to the school experience. Schoolwork becomes more relevant to Participants because it is connected to the real world they will soon be working in.

WORKFORCE READINESS CERTIFICATE PROCESS

The intent of the Workforce Readiness Certificate is to recognize a Participant's mastery of workforce readiness skills valued by employers, to help Participants explore career interests, and to provide a credential of Participant mastery.

This process allows:
- Participants to document their employability skills
- Employers and teachers to assess the skills they are looking for in quality employees
- Teachers to customize instruction to help learners to acquire skills that today's workplace requires
- Offer teachers, employers, and school partners a roadmap to help Participant overcome their barriers to employment - real or perceived

The Workforce Readiness Certificate is designed to provide local flexibility in its coordination and implementation:

1. Today's worker must be conscientious of 21st Century Skills framework needed for success in the workplace (see references). This framework describes the skills, knowledge and expertise Participants must master to succeed in work and life; it is a blend of content knowledge, specific skills, expertise and literacies. 21st Century Skills embraces life and career skills; information, media and technology skills; and learning and innovation skills. Within the context of core knowledge instruction, Participants must also learn the essential skills for success in today's world, such as critical thinking, problem solving, communication and collaboration.

2. The work-based learning component of the process may be met in any number of jobs/activities. School campuses are encouraged to review current local work-based learning programs against the program requirements for offering this process to their Participants.

3. Participants already involved in a school-supervised work-based learning activity such as industries, a work experience program, an internship, or service learning can use that experience for the work-based learning portion of this process.

4. The minimum number of work hours required of Participants is 90 hours which can be completed over the course of a quarter, semester, summer, year or longer, depending on individual Participant capacity to learn and program capacity to deliver.

5. Occupationally related instruction is not required for the Workforce Readiness Certificate although it could be a part of a given work-based learning opportunity where related instruction in skill development, safety, or technical skils is taught in addition to Participant's learning employability skills.

6. Career exploration and planning are essential components of workforce readiness and the cornerstone for making appropriate career, educational, and occupational choices. Selecting a relevant work-based learning opportunity offered in your school community should be part of the Participants Living, Learning and Working plan which will facilitate Participants' smooth transition from school to work and/or educational opportunities.

7. A Living, Learning, and Working Plan will assist Participants and teachers in relating each Participant's career interests and post-secondary education and employment aspirations to individual aptitudes and achievements. The specific objective is to create a plan of action that the Participant will follow throughout their educational journey. The plan provides concrete post-secondary plans and tentative career goals, identifies the steps that are required, and reinforces the commitment and responsibility of each Participant to take charge of his or her employment future. This written document is developed jointly by Participants and teachers. Although the plan development is a joint venture and the post-secondary plan ultimately reflects decisions made by Participants, the school is responsible for managing the process and for providing Participants with objective data that enable them to periodically re-evaluate the plan. This career exploration will lead to the creation of a portfolio the Participants can utilize to transition from school to further education or a career.

The certificate earned by the Participant will be issued by the Community High School of Vermont and becomes a part of the Participant's portfolio.

WORKFORCE READINESS CERTIFICATION REQUIREMENTS

School campuses that are interested in offering the Workforce Readiness Certificate must develop a Living, Learning, and Working Plan for each Participant. Approval must include the following requirements and methods of implementation:

1. The learning activities at school, on job sites, and in the community must be rigorous in providing for opportunities to achieve the Habits of Mind, Common Technical Core Standards, 21st Century Standards, and other related industry standards.

2. A CHSVT teacher must serve as the supervising teacher for the certificate in accordance with all certificate requirements.

PARTICIPANT REQUIREMENTS:

The Workforce Readiness Certificate experience is the responsibility of the Participant working with the supervising teacher, community organization, school-based entity, or employer. Participants must develop plans based on individualized career goals and abilities. The only restriction on the number of Participants in the certificate is availability and suitability of workplaces, community sites, and the size of classroom facilities. Participants participating in the Workforce Readiness Certificate process are responsible for the following:

- Obtaining and retaining work opportunities
- Attending school on a regular basis unless pre-excused
- Notifying the school and the cooperating organization or employer in advance when absence is unavoidable
- Meeting local expectations and requirements (e.g., keep in good academic standing, etc.)
- Furnishing the supervising teacher with all necessary information and completing all necessary reports
- Discussing any problems with the supervising teacher
- Keeping all information of the cooperating organization or employer confidential
- Cooperating with the community organization or workplace supervisor/mentor, engaging in assignments as a training experience, observing etiquette and observing safety rules
- Abiding by the rules and regulations of the surroundings

SUPERVISING TEACHER REQUIREMENTS:

- Visiting when and if able, and assisting community organizations or employers
- Observing each Participant when and if able
- Cooperating with the community organization or employer in the evaluation of the Participant
- Work with Participants to attempt to solve problems that may arise from the cooperating agency, school, employer, Participant or community
- Providing in-school instruction related to the training activities of the Participant (as appropriate)
- Developing the Living, Learning, and Working Plan with the Participant appropriate for the needs and desires of the Participant and the opportunities presented
- Providing school partners orientation about CHSVT as needed

COMMUNITY, EMPLOYER, PARTNER REQUIREMENTS:

- Providing a training program, with varied experiences, which will contribute to the education of the Participant
- Providing supervision/workplace mentor for the Participant
- Adhering to all state and federal labor laws, if applicable
- Providing for the day-to-day safety of the Participant on the job or within the organizational experience
- Offering a well-rounded variety of learning experience for the Participant

- Participating in the development of the Living, Learning, and Working plan with the Participant and the supervising teacher
- Cooperating with the supervising teacher in evaluating the Participant
- Maintaining a physical and ethical environment appropriate and beneficial to the Participant

WORK-BASED LEARNING COMPONENT

"Learning by doing" is the foundation of work-based learning. Participants must be provided the opportunity to participate in experiences that assess the use workplace skills. "Work" experience also supports the related classroom instruction and contextualizes the learning. Not only will Participants learn industry standards, but they will also apply them in the workplace. Not only will Participants understand industry standards but they will have the dispositions to apply the standards where needed.

Work-based learning at the workplace, in the community, and through school-based experiences occurs under the guidance of a school-based, community-based, or workplace employer. The Participant, along with these employers, develops experiences where leadership and other technical skills necessary for success in career and college can be offered which allow Participants to grow and expand their leadership skills and use of core workplace skills.

Work-based learning requires the integration of academic content and technical skill development. This effort is supported by employment standard and dispositions which emphasizes the need for:
- Business and education partnerships,
- Application of Habits of Mind,
- Career exploration and planning,
- Industry recognized employability skills and attitudes,
- School-supervised work experience, and
- Knowledge of all aspects of an industry.

Because the community-based or work-based learning component of this certificate may be delivered outside the local school campus, it is important that the local school work closely with the community organization or work-based employer to establish policies and procedures. Participants, teachers, community based organizations, and employers are required to follow all state and federal labor regulations (if applicable) pertaining to work experience programs.

Designing work-based learning that allow Participants to learn, practice, and master essential workplace competencies required four main criteria:

1. It should provide *models* of good workplace behavior, for example by providing historical or real life examples of workplace behavior, by providing opportunities for the teacher and others to model workplace behavior, by structuring experiences in which Participants model good workplace behavior for themselves, and by helping Participants identify good workplace behavior (or the lack of it) in everyday situations. The purpose of the *models* criterion is to make sure that Participants are provided with exemplars of what workplace dispositions look like in practice.
2. The program should also provide direct *explanations* about the purpose, concepts and methods of good workplace behavior. In other words, Participants should be told why good workplace behavior is important, and directly taught some key workplace concepts and skills. For example, they should be provided with explanations about such concepts as safety, workplace ethics, technical knowledge, task completion, customer relations. The purpose of

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the *explanation* criterion is to ensure that Participants are directly provided with information about the core concepts and methods of workplace dispositions.

3. A program for teaching good workplace behavior should provide plenty of opportunity for peer *interaction* around good workplace behavior. These are interactions in which Participants work together, discuss workplace fundamentals with one another, and so on. The purpose of this criterion is to bring the workplace dispositions alive for the Participant by anchoring it in meaningful interpersonal interactions.

4. The program should provide plenty of opportunities for formal and informal *feedback* around good workplace behavior. Through teacher feedback, peer feedback, and self-feedback, Participants should learn about the strengths and weakness of their workplace fundamentals. Feedback is one of the most powerful ways a culture teaches and expresses its values, and the purpose of the *feedback* criterion is to make sure the learning environment is one in which good workplace behavior is supported, encouraged, and truly valued in a way that is clear to the Participant.

WORKPLACE MENTORING COMPONENT

Mentoring activities are those that support the needs of Participants by developing and maintaining a supportive relationship with employers or other employees. The workplace mentor assists the Participants by helping them adjust to the culture of the workplace and orienting them to career options and pathways. Mentoring programs provide a variety of useful functions for Participants, both social and technical in nature. Exposing and socializing Participants to the world of employment strengthens ties to the labor market, increases access to opportunities, develops the positive social skills, and contributes to an atmosphere of cooperation and flexibility at the workplace. Employers should strongly consider providing a mentor for Participants at the workplace. A workplace mentor must be a skilled, experienced worker who can teach Participants about the industry and the world of work. The roles and responsibilities of the workplace mentor will vary from setting to setting but the following are basic functions that all workplace mentors perform:

- Initiate the Participant to the workplace culture—introducing Participants to an adult social system with its own rules, conventions, and norms. This can include both formal and informal organizational structures.

- Advise Participants on career directions and opportunities, provide networking opportunities, and generally help expand the Participant's career goals.

- Help the Participant to resolve practical problems—including personal difficulties encountered at work and school and work-related issues.

INTERVENTIONS THAT INCREASE WORKFORCE READINESS

RESEARCH-BASED EMPLOYMENT INTERVENTIONS:

1. Identify patterns of behavior behind participant's inability to obtain and/or sustain employment.
2. Learn and practice positive workplace skills.
3. Learn and practice positive communication skills with co-workers and employer.
4. Increase education, technical skills, and aptitude to support obtaining and sustaining employment.

INTERVENTION STEPS:

1. Assessment: (identify patterns of behavior and need)
    1. Level of Service Inventory (LSI)
        i. Quantitative survey of offender attributes and their situations relevant to level of supervision and treatment decisions
    2. Ohio Risk Assessment (ORAS)
        i. Dynamic risk/needs assessment system used with adult offenders. It offers criminal justice actors the ability to assess individuals at various decision points throughout the criminal justice system
    3. Career Decision Maker (CDM)
        i. Self-scored assessment that helps individuals identify their occupational interests, values, and abilities
    4. Barriers to Employment Success Inventory (BESI)
        i. Self-scored assessment that gives individuals a quick and easy way to identify the hurdles and obstacles that stand in the way of job success
    5. Job Search Attitude Inventory (JSAI)
        i. Helps individuals identify their attitudes about looking for a job and then offers suggestions for becoming more active and self-directed in the job search
    6. O*NET profiler
        i. An interactive application for exploring and searching occupations. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and Participants looking to find or change careers.
    7. Comprehensive Adult Participant Assessment System (CASAS)
        i. Used to assess adult learners in workplace literacy, family literacy, employment and training needs and other educational needs

2. Workplace Fundamentals: (Obtain & Practice workplace skills, improve communication skills)
    1. Use of Habits of Mind as positive workplace fundamentals to learn and practice
        i. Habits of Mind are the workplace fundamentals that Participants must learn and practice. The Habits of Mind are indicators of good work ethics. Ethics are a set of principle or values that govern an individual and/or a group.
    2. Learn the Habits of Mind (attend the Habits of Mind class if provided)
        i. Participants should identify and practice Habits of Mind which will assist them in changing the pattern of behavior behind their inability to obtain/sustain employment. They should also identify Habits that would bring about success during the application and interview process.
        ii. As Participants learn the Habits they should begin incorporating their learning into their portfolio. They should begin practicing the Habits they need more work on in difficult situations. Participants should be able to connect the Habits to other industry standards such as Common Career Practices and 21st Century Skills.
    3. Actively practice Habits during work with feedback

        i.   The Habits should be incorporated into the daily work environment as workplace fundamentals in evaluation and other supervision areas.

    4. Habits of Mind should be part of participant evaluation

        i.   What workplace fundamentals are most important to the given task or job description? Identify the specific Habit and evaluate for application of the Habit during work.

    5. Develop and utilize performance assessments of workplace fundamentals

        i.   Performance assessment is a form of testing that requires Participants to perform a task rather than select an answer from a ready-made list. Identify the task and provide feedback.

3. Technical Skills Training: (Increase education & technical skills)

    1. Document Participants attainment of technical skills

        i.   Can be accomplished through task completion lists, industry recognized curriculums, OJT forms, common core standards for technical education.

        ii. This documentation will serve as a scaffolding approach to future education, employment, and overcoming barriers.

    2. Industry recognized and career specific safety training and application

        i.   The basic fundamental of most industry jobs is safety on the job site and compliance with standards. Course work and application of safety standards will be required.

    3. Documented production skills

        i.   How is the Participant applying their increased employability skills to accomplish a task in a consistent manner? Participants will begin to identify productive patterns of behavior that lead to accomplishment of job tasks.

    4. Work-based learning (21st century skills)

        i.   As the world of work continues to demand innovation, the 21st Century Partnership and its members provide tools and resources to help educational systems keep up by fusing critical thinking and problem solving, communication, collaboration, creativity and innovation into their practice.

        ii. With assistance from CHSVT employment programs can implement evidence-based standards for participants that will support industry necessary skills.

4. Completion/Transition packet: (final assessment)

    1. Completion Portfolio

        i.   Each participant will complete a personal and professional portfolio to demonstrate their improved employability skills.

    2. Exit interview based on completed portfolio

        i.   The final performance assessment will serve as a practice interview and offer the participant the opportunity to communicate their skills improvement documented in their portfolio.

    3. Completion of transition plan & reassessment of needs

        i.   Pulling all the intervention components together transition plans and reassessment will take place to provide a thoughtful transition back to the community.

PROVIDING EVIDENCE OF MASTERY OF WORKPLACE COMPETENCIES

HOW CONDUCT WORKFORCE READINESS ASSESSMENT:

It is important for Participants to be able to provide evidence of mastery of employability skills and competencies in addition to being rated by teachers, employers, and/or community organization staff. This allows Participants to participate in the assessment process, learn techniques that have real-world application, and understand how they can improve. Ways in which Participants can provide evidence can include the following:

COMPILING PORTFOLIOS:

Portfolios are collections of Participant work that are typically used for an alternative assessment of competencies. Participant portfolios can take a couple of forms. One type of Participant portfolio contains work that shows the Participant's progression through the course of the school year. For example, writing samples about the Participant's on-the-job experiences might be taken from the beginning, middle, and end of the work opportunity. This can help show growth and provide teachers, partners, and the Participant with evidence of how the Participant has progressed. A second type of portfolio involves the Participant selecting examples of his or her best work. The portfolio can then be used as evidence of Participant work towards completion of the workforce readiness certification. A rubric can be developed so teachers or employer mentors can assess the work at the end of the school year.

DEMONSTRATING SKILLS:

Participants can demonstrate application of skills they learn through the use of role-play or simulations, in the real-world environment, and/or through analysis and resolution of a case study requiring the use of specific skills or behaviors. For example, Participants could be given a team-building scenario where they help other team members identify their strengths or resolve a conflict that develops.

PRESENTING TO OTHERS:

Giving oral presentations can provide Participants with public speaking skills that will benefit them in workplace and leadership settings. Providing Participants with an environment in which there is a question and answer session or opportunities for constructive feedback allows them to hone their critical thinking skills. Presenting to others could also include teaching concepts to someone else. For example, experienced Participants could teach new Participants about the importance of safety protocols in different workplace scenarios.

When selecting ways Participants can demonstrate mastery of competencies, it is important to obtain a good match between the skills you wish to measure and the means you use to measure them. Use several data sources to gain as complete a picture as possible. Not all skills and behaviors may lend themselves to direct, precise measurement.

DOCUMENTING PARTICIPANT MASTERY:

The supervising teacher, along with input from the community partners, co-teachers, or employer and the Participant, is responsible for assessing Participant progress during each quarter on the learning goals and employability skills identified on the Workforce Readiness Certification Assessment. For those tasks on which the Participant receives a level 1 or 2, the teacher, employer, and/or mentor identify specific areas where improvement is needed and suggests ways the Participant can improve performance. For tasks on which the Participant receives level 3, the teacher/mentor may give examples that illustrate the outstanding performance. A procedure for Participant assessment is described below:

The supervising teacher, community partner, employer, mentor is responsible for:

1. Assessment of Participant progress during each quarter on the identified tasks and workforce readiness skills.

Participants may master some tasks and competencies at multiple sites. Additional tasks and competencies to be mastered and assessed during the next grading period are determined. Set SMART goals, specific job tasks, identify challenging employment areas for the next quarter assessment.

2. Communication of results of the assessment to the Participant.

The supervising teacher and others involved if able, meet with the Participant to discuss the evaluation, identify areas that need to be improved, inform the Participant of the suggestions for improvement, identify strengths that have been pointed out on the job and in the classroom, and provide evidence to support the evaluation of the tasks and workforce readiness skills. Give the Participant a copy of the tasks and skills identified for the next quarter.

3. Continuation of the evaluation process.

For each quarter, the supervising teacher, working with the Participant and community or workplace mentor, should repeat this process.

ASSESSMENT LEVELS:

Workforce readiness skills will be rated throughout the process by preparing Participants to achieve "entry-level" skills the transfer across employment areas. Therefore each skill set will be rated as follows:

Level 1: Working to meet entry-level expectations. Needs improvement, requires much assistance and supervision, is unaware of when skills are challenging, rarely and/or inconsistently displays behaviors.

Level 2: Meets entry-level criteria. Requires some supervision and mentoring, is aware when skills are challenging, and often displays behaviors.

Level 3: Exceeds entry-level criteria. Requires minimal supervision, takes on leadership roles in the workplace, consistently displays behaviors.

Throughout the process assessment should be on-going, formative, and focus on self-assessment. Pre & post assessment methods are not effective when we are assessing dispositional thinking and workplace skills. Using on-going assessment we ensure that our feedback is timely and focused on specific skills, tasks, and environmental situations. Formative assessment allows Participants to understand how to continually set goals, restructure their understanding/skills and build more powerful ideas and capabilities. Self-assessment is essential to support internal capacity and motivation. Workforce readiness assessment must instill intrinsic motivation so the workplace skills become automatized.

<u>USING THE DIMENSIONS OF GROWTH TO ASSESS ACQUISITION OF SKILLS</u>

Habits of Mind are overarching workplace fundamentals, combined with Common Core Career Practices and 21st Century Skills specific workforce readiness skills can be taught. These dimensions of growth guide staff in effective strategies to use when teaching and coaching participants in the use of workforce readiness skills. Participants must learn to value the Habits which usually develop through application on the job or in a learning environment. Capability comes through application and practice of the Habits, seeing outcomes when the skills and the Habits of Mind are used. Inclination develops as learners see the benefit and choose to employ the Habits on a regular basis. When Participants become aware of opportunities to employ the Habits in their work they become committed to the use of the Habits as a set of workplace ethics. To help learners move through the dimensions we must coach on-the-job and infuse Habits in how we talk, teach, and supervise the people we work with. (Costa & Kallick, 2008, p.60)

1. **Exploring Meaning (value):**

- Choosing to employ Habits of Mind rather than other, less productive behaviors. Knowing how to use the Habits when you don't know an answer. Work is outcome based; employees must ask themselves "what is the goal?" And resolve conflicts productively.

2. **Expanding Capacities (capability):**

- Possessing the basic skills and ability to carry through with the Habits as a work ethic. Focus on performance under challenging conditions that demand: strategic reasoning, insightfulness, perseverance, and creativity.

3. **Increasing Alertness (inclination):**

- Having the tendency to employ the Habits of Mind to get the job done. Not only having information, but also knowing how to act on it. Involves others in decision making and looks at the big picture.

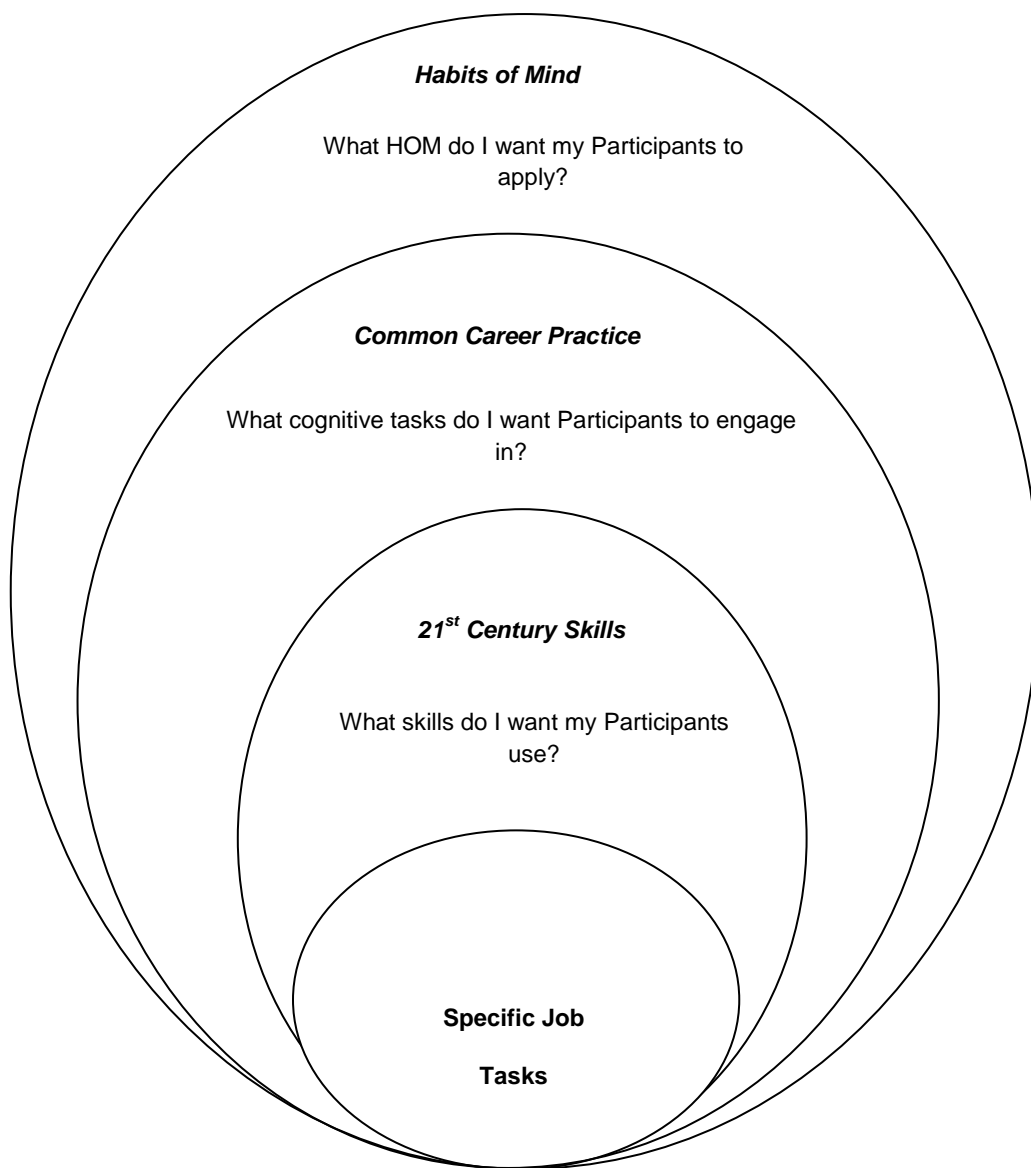4. **Extending Values (awareness):**

- Perceiving opportunities for, and appropriateness of employing a Habit to resolve problems, and enhance productivity. Create an environment that is creative with the ability to be innovative. At this point the Habits have developed into a set of personal work ethics used on a daily basis.

5. Internalization (commitment):

• Constantly striving to reflect on and improve performance of their work ethics. Having a disposition toward behaving intelligently when confronted with problems. Utilize a series of Habits and personal work ethics to answer the question "what is the goal?"

NESTED OUTCOMES:

When designing workforce readiness standards it important to think about the levels of outcome Participants are undertaking. Teachers, employers, and partners must continually think about the tasks, skills, cognitive abilities, and workplace Habits that Participants need to practice and master. In order for workforce readiness skills to become automatized they must become Habits that Participants can practice throughout their day.

Habits of Mind

What HOM do I want my Participants to apply?

Common Career Practice

What cognitive tasks do I want Participants to engage in?

21st Century Skills

What skills do I want my Participants use?

Specific Job

Tasks

Workforce Readiness Certification Skills	Assessment
Habit of Mind: Persisting Stick to it! Persevering in task through to completion; remaining focused. Looking for ways to reach your goal when stuck. Not giving up. **Career Practice: Utilize critical thinking to make sense of problems and persevere in solving them** Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem. They thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Managing Impulsivity Take your Time! Thinking before acting; remaining calm, thoughtful and deliberative. **Career Practice: Act as a responsible and contributing citizen and employee** Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Listening with understanding and empathy Understand Others! Devoting mental energy to another person's thoughts and ideas. Make an effort to perceive another's point of view and emotions. **Career Practice: Consider the environmental, social and economic impacts of decisions** Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organizations and the environment. They are aware of and utilize new technologies, understandings, procedures, materials and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and profitability of the organization.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Thinking flexibly Look at it Another Way! Being able to change perspectives, generate alternatives, and consider options. **Career Practice: Demonstrate creativity and innovation** Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Thinking about your thinking (Metacognition) Know your knowing! Being aware of your own thoughts, strategies, feelings and actions and their effects on others. **Career Practice: Act as a responsible and contributing citizen and employee** Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Striving for accuracy Check it again! Always doing your best. Setting high standards. Checking and finding ways to improve constantly. **Career Practice: Apply appropriate academic and technical skills.** Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Questioning and problem posing How do you know? Having a questioning attitude; knowing what data are needed and developing questioning strategies to produce those data. Finding problems to solve. **Career Practice: Utilize critical thinking to make sense of problems and persevere in solving them** Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem. They thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Applying past knowledge to new situations Use what you Learn! Accessing prior knowledge; transferring knowledge beyond the situation in which it was learned. **Career Practice: Apply appropriate academic and technical skills.** Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Thinking and communicating with clarity and precision Be clear! Striving for accurate communication in both written and oral form; avoiding over generalizations, distortions, deletions and exaggerations. **Career Practice: Communicate clearly, effectively and with reason** Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/ or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice and organization and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Gather data through all senses: Use your natural pathways! Pay attention to the world around you Gather data through all the senses; taste, touch, smell, hearing and sight. **Career Practice: Employ valid and reliable research strategies** Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use a reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices. They use an informed process to test new ideas, information and practices in their workplace situation.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Creating, imagining, and innovating Try a different way! Generating new and novel ideas, fluency, originality **Career Practice: Employ valid and reliable research strategies.** Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use a reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices. They use an informed process to test new ideas, information and practices in their workplace situation.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Responding with wonderment and awe Have fun figuring it out! Finding the world awesome, mysterious and being intrigued with phenomena and beauty. **Career Practice: Attend to personal health and financial well-being** Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Taking responsible risks Venture out! Being adventuresome; living on the edge of one's competence. Try new things constantly. **Career Practice: Model integrity, ethical leadership and effective management** Career-ready individuals consistently act in ways that align to personal and community-held ideals and principles while employing strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the direction and actions of a team or organization, and they apply insights into human behavior to change others' actions, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morale and organizational culture.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Finding humor Laugh a little! Finding the whimsical, incongruous and unexpected. Being able to laugh at one's self. **Career Practice: Demonstrate creativity and innovation.** Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Thinking interdependently Work together! Being able to work in and learn from others in reciprocal situations. Team work. **Career Practice: Work productively in teams while using cultural/global competence** Career-ready individuals positively contribute to every team whether formal or informal. They apply an awareness of cultural differences to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

Employability Skills & Attitudes	Assessment
Habit of Mind: Remaining open to continuous learning I have so much more to learn! Having humility and pride when admitting we don't know; resisting complacency. **Career Practice: Plan education and career path aligned to personal goals** Career-ready individuals take personal ownership of their own educational and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the educational and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors and other experts to assist in the planning and execution of career and personal goals.	Choose Level: Level 1 ☐ Level 2 ☐ Level 3 ☐

Specific job Example:

Participant Comments:

Teacher Comments:

Goals:

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